

An Historical Analysis of the Market-Entry of Non-Bank  
Competitors into the Retail Banking Markets in the USA  
and Germany between 1980 and 1990, and of the  
Investments made by Banks in Information Technology:  
- A Search for a Hypothesis about Causation

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### **Declaration**

I declare that the thesis has been entirely composed  
by myself.



## **Abstract**

**An Historical Analysis of the Market-Entry of Non-Bank Competitors into the Retail Banking Markets in the USA and Germany between 1980 and 1990, and of the Investments made by Banks in Information Technology: - A Search for a Hypothesis about Causation**

**Jörg Schulz**

Information Technology, Commercial Banks, Banking, Retail Banking, Financial Services, USA, Germany

Throughout the 1980s, information technology gained increasing importance within commercial banks. There have also been turbulent competitive developments in the retail banking market caused by non-banks making inroads into traditional banking business.

This research examines whether there is a direct correlation significant changes in the market environment of commercial banks and significant changes in the banks' information technology strategy.

The research develops an understanding of this complex relationship in two distinct retail banking markets, the USA and Germany, and in two steps. The first is a thorough literature analysis of the factors influencing the model, the market-entries of selected non-bank competitors, and banks' general strategic response. The second is a qualitative research on the banks' strategic response, in particular in terms of information technology. The change of the IT strategy is measured by the investments made by banks in information technology.

The research finds that commercial banks responded with a time lag of 1 to 1.5 years to market-entries of a substantial competitive and strategic scale. They spent more than twenty percent of their information technology budget devoted to information technology investments in the retail banking function of their institution, to respond to the market-entry. Thus, a direct correlation seems to exist.

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## Abbreviations

ACH	Automated Clearing House
AI	Artificial Intelligence
APL	Advanced Programming Language
AS	Application System
ATM	Automated Teller Machine
BHC	Bank Holding Corporation
BoG	Board of Governors
CEO	Chief Executive Officer
CEBA	Competitive Equality Banking Act
CIO	Chief Information Officer
COO	Chief Organisation Officer
CB	Commercial Bank
CD	Certificate of Deposit
CMA	Cash Management Account
CU	Credit Union
CUNA	Credit Union Association
DB2	Data Base 2
DIDMCA	Depository Institutions Deregulation and Monetary Control Act
DP	Data Processing
DSGV	Deutscher Sparkassen- und Giro Verband
EC-Card	Eurocheque-Card
FCDA	Financial Centre Development Act
FDIC	Federal Deposit Insurance

	Corporation
FED	Board of Governors of the Federal Reserve System
FHLS	Federal Home Loan System
FIDIS	Fiducia Informationssystem
FIRREA	Financial Institutions Reform, Recovery, and Enforcement Act
FRB	Federal Reserve Bank
FRN	Floating Rate Note
FRS	Federal Reserve System
FSLIC	Federal Savings and Loan Insurance Corporation
GZS	Gesellschaft für Zahlungssysteme
HNWI	High Net Worth Individual
IBF	International Banking Facility
IFSCS	Integrated Financial Services Consulting Station
IS	Information System
IT	Information Technology
KWG	Kreditwesengesetz
LAN	Local Area Network
LDC	Less Developed Country
LPO	Loan Production Office
M & A	Mergers and Acquisitions
MCB	Money Centre Bank
MMDA	Money Market Deposit Account
MMMF	Money Market Mutual Fund
MNC	Multinational Corporation

MSB	Mutual Savings Bank
NAIC	National Association of Insurance Commissioners
NCUSIF	National Credit Union Share Insurance Fund
NIF	Note Issuance Facility
NOW	Negotiable Order of Withdrawal
OCC	Office of the Comptroller of the Currency
OCR	Optical Character Reader
PIN	Personal Identification Number
POS	Point-of-Sale
RoA	Return on Assets
RoE	Return on Equity
RTC	Resolution Trust Corporation
S & L	Savings and Loan Association
SEC	Securities and Exchange Commission
SNA	System Network Architecture
SQL	Structured Query Language
US	United States
VAG	Versicherungsaufsichts-Gesetz

## US State Abbreviations

AL	Alabama
AK	Alaska
AZ	Arizona
CA	California
CT	Connecticut
DC	District of Columbia
FL	Florida
GA	Georgia
IA	Idaho
IL	Illinois
IN	Indiana
KY	Kentucky
KS	Kansas
LA	Louisiana
ME	Maine
MD	Maryland
MA	Massachusetts
MI	Michigan
MN	Minnesota
MS	Mississippi
MO	Missouri
MT	Montana
NE	Nebraska
ND	Nevada
NJ	New Jersey

NY	New York
NC	North Carolina
OH	Ohio
OK	Oklahoma
OR	Oregon
PA	Pennsylvania
RI	Rhode Island
SC	South Carolina
SD	South Dakota
TN	Tennessee
TX	Texas
UT	Utah
VA	Virginia
WVA	West Verginia
WI	Wisconsin

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## **1. Introduction**

### **1.1 Introduction to the Topic**

Throughout the late 1970s and the 1980s, the development of information systems (IS) and related information technology (IT) gained increasing importance within commercial banks. IT developments such as electronic banking facilities, automated teller machines (ATM), expert systems, highly proficient customer databases, and communication links to a whole array of business partners, are by now standard facilities in a modern, successful commercial bank. This context raised first of all the question of what was responsible for this activity. Was it merely IT-related innovations and cyclic technological breakthroughs that triggered changes in commercial banks' IT strategies, or was a significant change in the banks' market environment, as it periodically happens in many dynamic industries, responsible for a change in the IT strategy? It is the central question of this investigation to find out whether significant changes in the market environment of commercial banks directly correlate with significant changes in the banks' IT strategy.

This question shall be analyzed by looking at an important market segment of a commercial bank, the retail



banking market and its competitive developments. This market segment showed particularly turbulent competitive developments throughout the 1980s, through non- and near-banks making inroads into traditional banking business. The result of these movements is reflected by decreasing growth of deposits made by the nonbank sector of the economy, in several years throughout the 1980s (the relevance of these years will be shown during the dissertation), as well as by decreasing credit taken by nonbanks. Appendices 8 to 13 give an indication of the competitive developments between commercial banks and nonbanks during the last decade in the US and Germany.

To investigate the central question of whether a direct correlation exists between a change in the banks' market environment and their IT strategies, and to provide greater evidence for the outcome, two different banking systems were deliberately chosen: the US separation banking system, which by law consists of two distinct parts, commercial and investment banking, and the German universal banking system. The retail banking markets in both countries are analyzed in light of the market-entry of various types of nonbank institutions, and commercial banks' reaction to it. Detailed analyses of the market-entries, their competitive implications on commercial banks, and banks' strategic response are provided in chapters 4, 5, 6, and 7.

The hypothesised direct correlation between a significant change in the market environment of a commercial bank due to the market-entry of nonbank competitors into the retail banking market, and banks' reaction in terms of their IT strategy is influenced by several factors. One of them is the regulatory environment for banks and nonbanks in the retail banking markets under consideration. Another is the change in private households' purchasing behaviour of financial products and services which was observable throughout the 1980s. These factors are complemented by the way commercial banks perceive the role and significance of IT and information systems within their organisations. Part 1 of this dissertation contains brief analyses of these influencing factors, and establishes their significance for the research objective.

Before describing in depth the thrust of this research it is important to state that in a turbulent and complex market environment, such as the retail banking market, not only non- and near-bank competition, but also other aspects such as primarily interbank competition and the market-entry of foreign banks have significant impacts on domestic commercial banks. It might be even the case that interbank competition - with regard to large commercial banks - is perceived as a stronger competitive force than nonbank market-entry because of the general tendency among large contenders of an industry to quickly respond to competitive

moves by their rivals. However, it was the objective of this research to look at changes in commercial banks' IT strategy caused by a change in the market environment solely from the perspective of nonbank competition. Interbank competition and the market-entry of foreign banks has been deliberately left aside in order to be able to isolate and explore in detail the perceived correlation between nonbank competition and the IT strategy of a commercial bank. Such a research strategy is a necessary approach to keep the research focused. The other two aspects also clearly have their justification in this wide research area but will not be analyzed any further in this thesis.

## **1.2           The Research Thrust**

The relevance of this topic is determined by the role of the financial services industry as an intermediary between all sectors of a national economy. That role necessitates that the provision of banking products and services is controlled and supervised by a dedicated banking legislation to ensure a stable and functionable banking system, depositor protection, and a safe and sound money supply in the economy. As a consequence, market entry restrictions for non- and near-banks concerning various banking products and services have been implemented in the past. However, the last decade has witnessed substantial

inroads made by those non- and near-banks into traditional banking services. In 1983, Volcker, the then-chairman of the Board of Governors of the Federal Reserve System identified several factors responsible for that development in the US:<sup>1</sup>

- the innovation of financial services that represent close substitutes to typical, protected banking services.
- a more liberal interpretation and various changes in banking regulations due to market pressures.
- the competitive disadvantage of commercial banks caused by the structure of the US banking system.
- significant changes in consumer' purchasing behaviour of financial products and services.
- the strategic application of information technology for a more cost-effective and faster provision of financial services.

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<sup>1</sup> Volcker, P.A., 'Statement before the Congress', April 26, 1983, in: Federal Reserve Bulletin, vol.69, pp.356-364.

Based on the statements made by Volcker, one can identify three broad factors, that determine competition in the retail banking services industry, (1) the significance of IT, (2) consumer purchasing behaviour, and (3) the structure and regulations of the banking system. Hence, before discussing in detail the competitive situation in the retail banking services industry in light of the market-entry of nonbanks, and commercial banks' strategic reaction, particularly in terms of their IT strategy, it is necessary to briefly demonstrate the significance of the influencing factors mentioned above for both banking markets under investigation.

Following that line, the strategic importance of information technology for a modern commercial bank will be first established. This is important in light of the fact that particularly since the early 1970s, strategic considerations have covered virtually all functions within an enterprise. The context of business strategies and strategy formulation was also a very widely researched academic area throughout the past two decades. Essentially, it is this development that made a hypothesis like the one in this dissertation, which inter alia analyses changes in the IT strategy of a bank, possible. Section 2.1.2 discusses this aspect in detail.

In the context of the market-entry of nonbank

competitors, the structure and legislation of both banking systems is also of crucial importance. This is the case for two reasons. Firstly, banking legislation clearly separates banking and non-banking business, and therefore defines the competitive potential of non- and near-banks. Secondly, the structure of a national banking system could clearly be responsible for differences in the development of typical characteristics of non- and near-bank competition in both countries. Although these differences are assumed to exist, which was a main criterion in the first place for choosing these two diverging banking systems, and although they do not form the main focus of attention regarding the correlation to be investigated, they definitely impinge on the potential market-entry and hence need to be discussed. In light of that situation, a brief analysis of the banking system in Germany and the US with special focus on nonbank regulations is presented in section 2.2.

Finally, a brief discussion of the changes in consumer purchasing behaviour of financial services that intensified such trends as disintermediation, securitisation, and conglomeratisation, and facilitated the rise of non- and near-banks will be presented. Appendix 13 indicates the rise of these non- and near banks by illustrating the development of their relative importance in relation to all financial institutions. These discussions form part 1 of

this dissertation, called the foundation of the investigation.

Part 2 of the dissertation consists of a structured analysis of competitive changes in the retail banking services market triggered by four different types of nonbanks, insurance companies, thrift institutions, retail organisations, and credit card organisations, and commercial banks' strategic reactions in both countries. This analysis was conducted by:

- (a) focusing on individual services of selected non- and near-banks, and establishing their competitive relevance as a substitute service. If that service was triggered by a change in regulations, special emphasis was put on that aspect.
- (b) analyzing the competitive implications of these changes in the market environment on German and American commercial banks. The focus thereby lay on nonbanks' market entry and penetration strategies.
- (c) analyzing the various strategic answers and related IT activities of both German and American commercial banks to respond to these changes in

their market environment.

On the following pages a detailed description of the research including approach, design, and methodology used, is presented. This description begins with a brief research overview.

### **1.3        Research Overview**

The research was evolutionary and carried out in essentially two stages. Both stages are exploratory in approach although the methodology differs. Figure 1 provides a road map for the research.



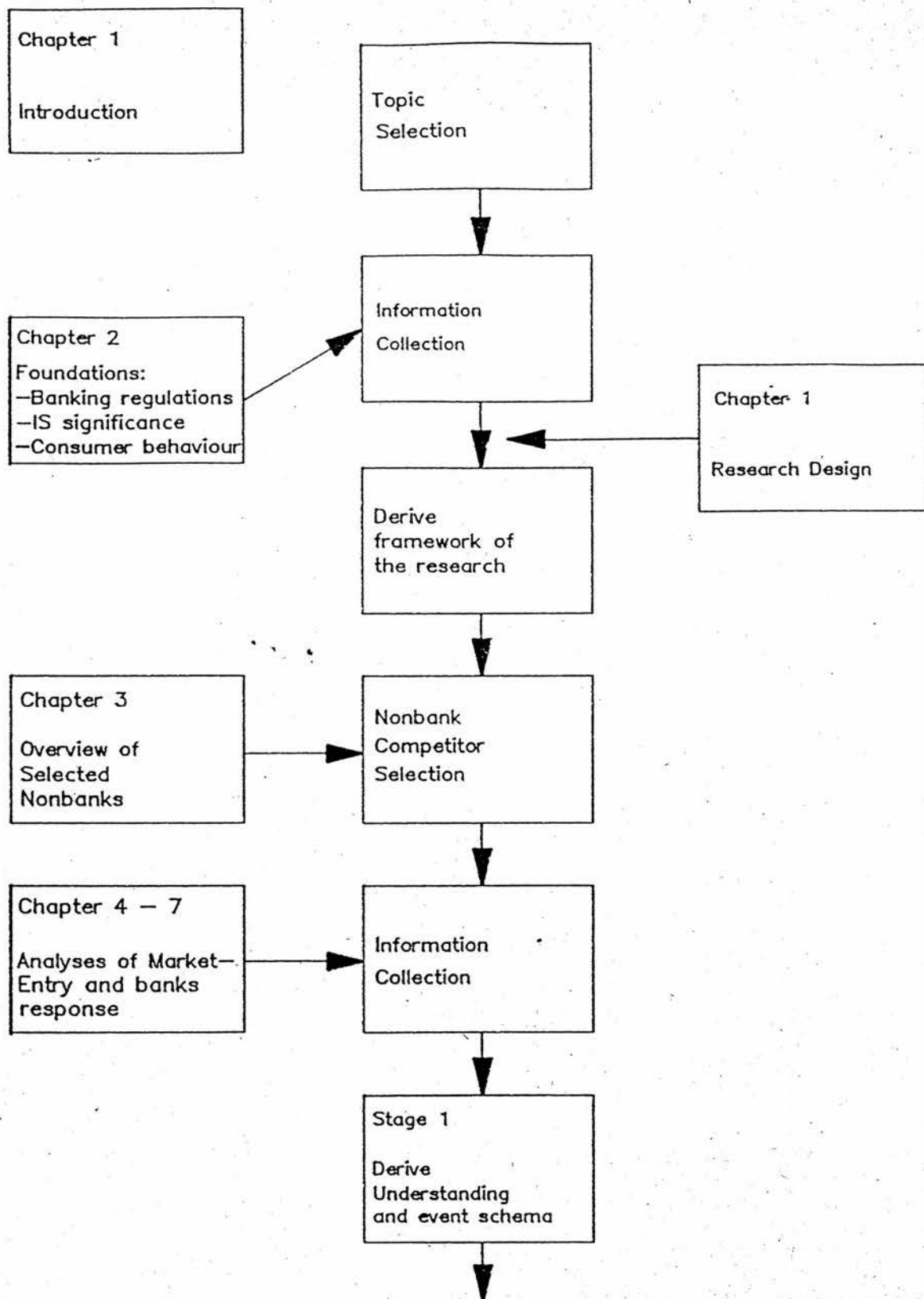


Figure 1: Research Design

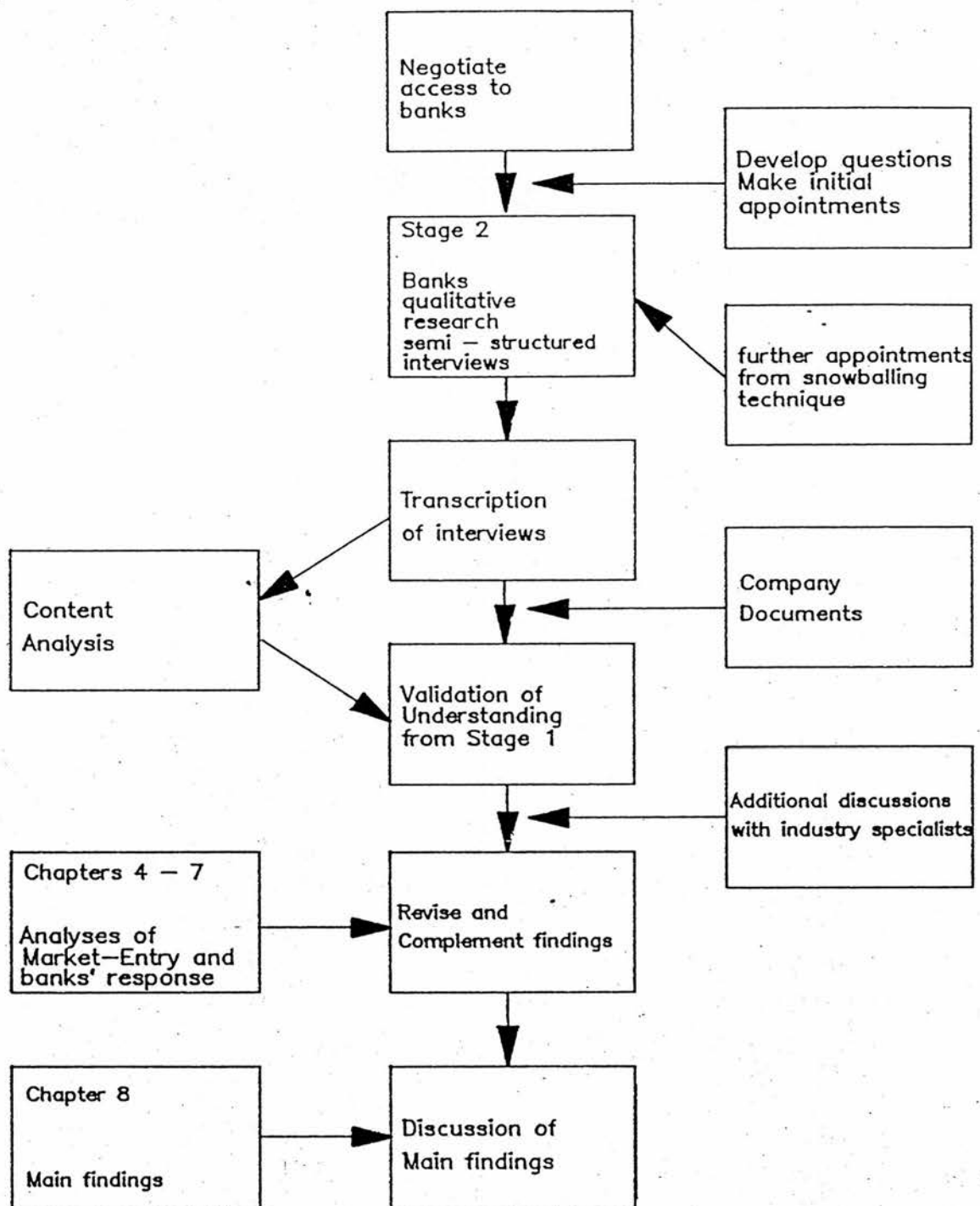


Figure 1: continued

There are two stages in the research. These build on each other to provide the results as presented in part 2 of this dissertation. They use different methodologies to provide insights into the fascinating area of banking markets, and information systems and technology. Both areas are turbulent and complex, which means permanent change and adjustments for the companies operating in such a business climate. Understanding such complex and volatile issues therefore required a research approach that combined both a solid literature review to create a proper foundation for the investigation, and a qualitative and inductive approach to explore the central question of this dissertation.

After having laid down the framework of the research (as presented in chapter 2) by discussing the influencing factors based on the relevant literature, chapter three introduces the nonbank competitors that were selected in both retail banking markets to examine our hypothesis. It also highlights the selection criteria applied.

It is the author's firm conviction that the only method for developing an understanding of the perceived direct correlation between a significant change in the banks' market environment due to the market-entry of nonbanks, and a significant change of the banks IT strategy was the method of structured analysis supplemented by semi-structured interviews. It was the objective of stage 1 to

build up an event-schema<sup>2</sup> for the decade of the 1980s that shows the market-entry of selected nonbank competitors, and commercial banks' strategic reaction for both the German and US retail banking markets. This was primarily achieved through an extensive literature review.

In stage 2, bank managers of predominantly two functions, namely general business strategy and IT, could then be confronted with these event schemes and asked to describe and pinpoint the reaction of their institution in terms of competitive movements and IT strategy. These findings were then used to validate the understandings from stage 1, and supplemented by additional discussions with industry specialists, consultants, and executives of IT vendors, in order to generate grounded, substantive theory.<sup>3</sup>

Chapter 8 highlights the most interesting and unexpected results of the research. It also offers pointers for further academic work in this fascinating area.

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<sup>2</sup> Pettigrew, A., 'On studying organisational cultures', in: Qualitative Methodology, ed. by van Maanen, J., Beverly Hills, 1979.

<sup>3</sup> Glaser, B. G. / Strauss, A. L., 'Discovery of Substantive Theory: A Basic Strategy Underlying Qualitative Research', in: Qualitative Methodology: Firsthand Involvement With The Social World, ed. by Filstead, W. J. Chicago, 1970, pp.288-301.

#### **1.4            The Research Approach**

The research approach, using qualitative analysis as well as extensive literature reviews including a whole array of journals, periodicals, press clippings, and a review of the previous research work in this area, was felt to be the only method to tackle this complex research issue.

Due to the complex nature of the research issue and the fact that similar investigations in the retail banking industry have not been conducted, an explanatory approach to study our research issue was necessary. In addition, the nature of the variables proved to be very qualitative. A quantitative methodology, such as regression analysis, to finally test the grounded theory statistically (in our case the perceived correlation) was therefore felt to be superfluous. The secretive nature of the banking industry in the provision of hard figures was also a restraining factor.

In order to provide greater evidence for the perceived correlation under investigation the author found that applying a comparative analysis to explore this research issue in two different banking markets would be a suitable approach.

These and other methodological issues of the research are further discussed in section 1.5.

## 1.5 The Research Design

This research arose out of an earlier study into IT, information systems, and the banking market<sup>4</sup>, and from the researcher's personal work experience with an IT manufacturer whose clients, inter alia, were large commercial banks.

Before discussing in-depth the research design, it is important to restate the starting point of this research. In talking to bankers, a statement frequently made by them was "...you know we have been operating in an increasingly volatile market environment for the past ten to fifteen years. Our systems expense budgets in both retail and wholesale banking are growing significantly...".<sup>5</sup>

In addition, as we will see in section 2.1 of this dissertation, IT must be regarded as a critical success factor for a modern commercial bank, which requires continuous investment and the formulation of strategies. As

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<sup>4</sup> Schulz, J., Enterprise-wide Modelling as an Approach of Banks to Cope with Recent Changes in the Regulatory Environment, Competition, and Customer Behaviour under the Perspective of 1992, unpublished MBA dissertation, University of Edinburgh, Edinburgh, 1990.

<sup>5</sup> Rahlves, H.D., Director of Organisation at Deutsche Bank AG, 1991.

a consequence of these discussions with bankers and IT vendors, the thought arose that it might be expected that the aggregate spending on IT (please see Appendix 16), the development of information systems, and their application follows a certain trend line which is associated with changes in that market environment. This potential correlation triggered the research efforts presented in this dissertation.

It was felt that the general approach to meet the research objective - does a significant change in the market environment of a commercial bank, due to the market-entry of nonbank competitors, directly correlate with a significant change in the banks' IT strategy ? - was inductive, and was best served by a thorough literature review, and the complementary use of qualitative methodology. This combined approach allows a synergistic view of the evidence, and provides supplementary and mutual verification of the research problem.

The literature review of stage 1 of the research process allowed the research to gain familiarity with the phenomenon to be investigated, to identify influencing factors, and to systematically create a foundation for the thesis. Stage 2 on the other hand, established the final pattern and inter-relationship between the variables of this investigation. Mintzberg confirms this approach:



"For while systematic data creates the foundation of our theories, it is the anecdotal data that enables us to do the building".<sup>6</sup>

Apart from identifying influencing factors, stage 1 was designed to develop an event schema of the market-entry dates, and related activities of selected nonbank competitors and commercial banks' strategic reactions to it. In order to pinpoint the date of the commercial banking industry's strategic response to the market-entry of nonbank competitors in both the US and Germany, the first response of one of the large enterprises of the commercial banking industry is identified as the response date. This approach covers two important issues. Firstly, it neutralises the possibility that in many instances a tiny little enterprise of an industry can legitimately claim to have been first to respond to changes in the market environment without having significant market power and importance to establish a substantial difference. Secondly, it takes into consideration the natural imitation effect and follower strategy among large contenders of an industry. The banks that were included in the research sample are presented in section 1.5.1.

Only those types of nonbank competitors were chosen for investigation that were observable as substantial

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<sup>6</sup> Mintzberg, H., 'An emerging strategy of direct research', in: Administrative Science Quarterly, vol.24, Dec. 1979, pp.582-89.



competitors in both retail banking markets. Chapter 3 provides an overview of these competitors.

A time horizon of one decade was felt to be sufficient for this research. Hence the interval 1980 to 1990 was chosen.

#### **1.5.1 Multicompany Research**

The author felt that a research objective like ours can only be met by focusing on the 'big players' of the commercial banking industry. This is true for three reasons: the availability of information, the size of the IT budget, and the comparability of German and US commercial banks. Bearing in mind the strongly secretive nature of the banking industry compared to other industries, the availability of information stemming from bank internal and external sources increases with the size of the bank. In addition, attempting to analyze a perceived correlation such as the one in this research requires substantial IT budgets and the intention of a company to remain state-of-the-art in terms of technology used. Furthermore, the comparison between the US and German banking markets required commercial banks that provide similar product and service ranges. Only large, global-orientated commercial banks meet this requirement. Finally,

the author's personal contacts dating back to his work experience with commercial banks influenced the structure of the research sample. Hence, Deutsche Bank, Dresdner Bank, Commerzbank, and Fiducia were chosen in the German market, and Citicorp and Chase Manhattan for the US retail banking market. The product and service ranges of banks of this size are very alike. This is not the case if, for example, the US and German savings banks industry is compared.

Single company research, despite its richness of detail, was rejected as a feasible approach because of its disadvantage to generalize from.

In practical terms, an understanding of such a complex research issue requires multicompany research. It also requires much effort and time to be put into each company to achieve the research quality needed. A larger sample could not have been researched in the time scale available, and bearing in mind the relative secretive nature of the commercial banking industry. Additionally, the banks chosen are among the leaders in both markets.

There are of course some trade-offs to be made. It is difficult to generalise from a small sample. There is also the danger of researcher bias, and the fact that the same variables and relations might be slightly different in each

organisation of the same industry. However, the decision on how the research is designed depends on the research goals, strategies, and largely the industry context. The aim of our research is to create a fairly broad model. Given the nature of the variables, the nature of the industry, the criteria mentioned above, and the size and market position of the companies chosen, this approach is inevitable and the most valuable. Important insights can be gained that can be tested in different ways at other times.

#### **1.5.2      The Qualitative Research - Stage 2**

The research method of stage 2 is qualitative and inductive in nature. It is based on the principles of developing grounded theory<sup>7</sup>, which proceeds in a bottom up direction in that hypotheses and theory are generated from ground up with raw data as a starting point. This approach is regarded as extremely practical<sup>8</sup>, useful in theory formulation, and enables the prediction and exploration of behaviour. As a result of a research process that creates theory from data, constructs, concepts, models, and hypotheses generally emerge during this process. However, the initial model itself may come from sources other than

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<sup>7</sup>      Glaser, B. / Strauss, A., The discovery of grounded theory, Chicago, 1967.

<sup>8</sup>      Sekaran, U., Research Methods for Business, 2nd edn., New York, 1992, Ch.7.

the data. In our case the perceived correlation came from an observation of the environment and was narrowed down and refined through stage 1 of this research (the creation of an event-schema).

#### **1.5.2.1 The Research Process and Interview Method**

Contact with the banks arose from personal contact with various key staff, stemming from the author's previous work experience in this business area. Additionally, by contacting management consultants and industry specialists within IBM, valuable contacts could be made that would have been extremely difficult to achieve otherwise.

Due to the nature of the variables and the already existing event-schema at this point in time, primarily two key functions within the banks had to be interviewed, the strategy/marketing function which was able to provide information on the organisation's competitive behaviour towards the threatening market-entry of nonbanks, and the IT/IS function responsible for the development and implementation of IT strategies and the required investments.

It was the aim of this study to interview the relevant key managers in all banks - that is senior managers and functional executives - to achieve the highest possible

degree of standardisation. Hence, the respondents did not vary widely in function, age, and responsibility. Interviewing stopped when key personnel had been interviewed and when no further information was discovered. In the case of a denial of a personal visit, telephone interviews with these managers were held in order to meet the objective of the research process. For the sake of clarification of some details, and due to the complex research topic, a snowballing technique<sup>9</sup> was occasionally used to identify further specialists and departmental managers. Among those were also for example executives and higher management of the banks' subsidiaries such as the Deutsche Bank Bauspar AG (the bank's captive thrift institution) or Deutsche Bank Lebensversicherung AG (the bank's captive life insurance subsidiary).

The interviews were semi-structured and lasted between one and three hours. They were recorded by constant note taking. Most of the interview partners were not willing to be tape recorded. After having agreed on constant note taking, the respondents expressed their opinions very openly and gave as much time as was required.

Guided by the event-schema specific, precise questions

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<sup>9</sup> Spekman, R.E. / Stern, L.W., 'Environmental uncertainty and buying group structure: an empirical investigation', in: Journal of Marketing, vol.43, Spring 1979, pp.54-64.

were asked. The objective was to cover the issues pre-determined by the literature review, and gradually widen the scope of the questions.<sup>10</sup> The central questions include discussions of the following:

1. Nonbank competitor activities
  - effect on the organisation
  - market penetration strategies
  - the future of nonbank competition
  - characteristics of nonbank competition
2. The bank's strategic response
  - timing and conditions
  - business strategy to respond
  - change within the organisation
3. The development of IT
  - role of IT within the organisation
  - future of IT within the banking industry
  - impact of IT on relationships with business partners
  - IT strategies and their formulation
4. Change of the IT strategy
  - timing and conditions
  - required IT activities and cost
  - IT budget developments

Interviews took place between November 1991 and April 1992.

In restating the perceived correlation, that a significant change in the market environment, due to the market-entry of nonbank competitors, is directly correlated with a significant change in a commercial bank's IT strategy, one factor - the attribute significant - requires

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<sup>10</sup> A summary of the questions is provided in Appendix 1.

further explanation. In line with our research approach, bank managers within the IT/IS function<sup>11</sup> were asked to describe and quantify the reaction of their institution in terms of a change in the IT strategy. In order to 'test' the significance of a change in the banks' IT strategy, the IT budget allocated to the retail banking function (this dissertation only analyses the retail banking market) was applied as a yardstick. This was done in order to introduce a quantifiable parameter, and because of the author's experience in this area, supplemented by research in other industries in which the IT budget was identified as a frequently used instrument of IT strategies.<sup>12</sup> At first sight, it also appears reasonable to look at the banks annual accounts, especially their depreciation charges, which might give guidance on the growth of spending on information technology. However, this approach is not helpful with regard to our research problem because of the incomparability of accounting standards in the US and Germany concerning depreciation methods, and the fact that depreciation charges are only published as part of commercial banks operating expenses, which also includes for instance depreciation of buildings, property, and

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<sup>11</sup> The function is called IS/IT function because some banks simply call it IT, whereas others call it IS. However, both mean the same function.

<sup>12</sup> Hogarth-Scott, S., The Impact of Information Technology on Retailer-Manufacturer Relationships, Ph.D Dissertation, University of Bradford, 1991, p.98.

general business equipment. Appendix 16 indicates large German commercial banks' operating expenses of the banking business throughout the previous decade.

Discussions with various bank managers in these functions, industry consultants, and executives of IT vendors, led to the assumption - in the sense of an operational definition for the purpose of this dissertation - that a change of at least twenty percent of the IT budget devoted to IT expenditure and investments in the retail banking function of a commercial bank to react to the market-entry of nonbank competitors must be regarded as significant.

Furthermore, in order to be able to test the correlation with the market-entry of a nonbank competitor, this change in the IT budget was only investigated in the year of the banks' strategic response to the market-entry.

In order to determine the change in the IT budget, IT managers were asked to isolate the aggregated cost of IT activities such as the purchase of IT equipment, systems design activities, project cost etc., which were directly attributable to the strategic response of their organisation to the market-entry of a specific type of nonbank competitor. They were then asked to rank this aggregated cost block against the total IT budget devoted



to the retail banking function.

The interviews were transcribed, followed by a thorough content analysis to cluster and summarise the notes taken. This was done to discover patterns within the data concerning the correlation of the variables that led to a better interpretation of the data, a more holistic view of the entire research issue, and also culminated in the development of diagrams at the end of chapters 4 to 7 which try to graphically illustrate the correlation.

Other sources of information include the use of extensive company documentation which was provided by both the relevant banks and nonbank competitors. These were supplemented by consultant reports, and industry and sales analyses provided by IT vendors (predominantly IBM). They represented additional sources to validate the results. The documents that were used are quoted in the relevant sections.

The results obtained through the individual research stages were also discussed with independent industry consultants, such as McKinsey, to add another, more holistic angle to the findings.

With regard to validity and reliability of the findings, the research as a whole should be considered.

Both stages were necessary to fulfil the research objectives. Stage 1 would not have met the research objective on its own. It was a required preliminary step from which stage 2 benefitted. Both stages also have different value and form part of the total research approach, both methodologically and conceptually. The interviews held at stage 2 were as free of researcher bias as possible, and the literature was as objectively assessed as possible. As a consequence of these reasons, questions of validity and reliability must be applied to the whole research and the main findings, and not to each stage separately.

#### **1.6            The Significance of the Study**

Thus far, an extensive literature base exists in the area of industry analysis and the strategic value of information technology. This study pulls these disparate areas together by means of correlation. This provides new insights. In attempting to prove that there is a direct correlation between a change in the market environment and a change in the banks' IT strategy, an area which has not been tackled before, extremely helpful insights for both bank executives and IT vendors are presented, regarding the allocation of fastly increasing budgets and the related spending behaviour.

In trying to clarify that a correlation between these variables exists, this study builds a new framework for further empirical research in this particular research area.

## Part 1:

### 2. Foundations of the Investigation

Several reasons for nonbank institutions to encroach upon traditional retail banking business in the 1980s are observable. These can be identified as (a) the constantly growing profitability ratios<sup>13</sup> in the commercial banking industry of the 1970s, (b) stiffer competition and poorer growth outlook in the incumbent industries<sup>14</sup>, (c) positive profitability outlooks in the consumer banking market segment, due to changes in consumer demand patterns of financial services, and intensified utilisation of information technology (IT) in the area of routine banking services with its production cost reduction effects. However, this at first sight highly lucrative market segment is protected by banking regulations. In both

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<sup>13</sup> Gregorash, G. / Maloney, E., 'Banking 1988: The eye of the storm', in: Economic Perspectives, FED of Chicago, July/Aug. 1989, pp.2-12.

<sup>14</sup> Moody's Industry Outlook for the retail market predicted only moderate growth in the retailing industry for the second half of the 1980s and the beginning of the 1990s.  
Pavel, C. / Rosenblum, H., 'Banks and nonbanks: The horse race continuous', in: Economic Perspectives, May/June 1985, pp.3-17, here p.6.

banking systems, the US and the German banking system, the market-entry of nonbanks into the retail banking market is restricted by legal entry barriers to ensure a safe and sound status quo of the national banking system. Hence, the national banking legislation is responsible for the degree of competition between banks and nonbanks, and the market potential permitted to nonbank competitors. This clearly influences the market-entry side of our correlation and is therefore discussed in more detail in sections 2.2 and 2.3.

Comparable competitive developments between commercial banks and nonbanks in both countries preempt a comparable market environment. If such a condition does not exist - as in the case of the regulatory environment - national characteristics of the banking system remain an important influencing factor in the competitive relation between banks and nonbanks. This environmental force might then have an impact on the perception of commercial banks in how to strategically respond to the market-entry of a nonbank competitor.

A second important environmental factor that impinges on the perceived correlation - again the market-entry side - is the demand pattern of financial services. Without a strong demand side that is responsive to attractive financial products resembling substitutes to traditional banking products, there is no point in a nonbank competitor

even attempting a market-entry. Differences in the development of this demand pattern in both banking markets may also be responsible for different competitive developments between banks and nonbanks. Hence, similar to an analysis covering the legislative environment an analysis of the changing purchasing behaviour of financial services in the US and Germany is required in order to understand later on (in stage 2 of the research) potential differences in commercial banks' strategic response. This analysis is presented in section 2.4.

Finally, commercial banks' perception of the strategic significance of information systems and their underlying technology also has an impact on our perceived correlation between a significant change in the market environment due to the market-entry of nonbank competitors, and a significant change in the banks' IT strategy. If a company does not regard IT as a critical factor contributing to the success of the enterprise, it is unlikely that its IT strategy would significantly change in response to a changing market environment. Hence, it is necessary to establish that IT is of strategic importance for a modern commercial bank. This is done in section 2.1.

In addition, the fact that since the 1970s research into business strategy and strategy formulation has covered virtually all functions within an enterprise, represents an academic angle that made a hypothesis like the one in

this dissertation possible, which at least in parts also deals with a strategy element.

However, if large commercial banks in both countries, despite existing differences in the legislative environment, divergent developments in the demand pattern of financial services, and their perception of the strategic significance of IT, do react with a significant change of their IT strategy to the market-entry of a nonbank competitor, a direct correlation between that market-entry and a commercial bank's IT strategy might exist.

As a consequence of these considerations, it is crucial to briefly discuss both banking systems, changes in the consumer demand pattern of financial services, significant changes in the regulatory framework, and the perception of the strategic relevance of IT for a modern commercial bank, as influencing factors to the hypothesis and its underlying variables under investigation.

## **2.1           Significance of IT for Commercial Banks**

### **2.1.1       Definitions**

Since the early 1980s, the time when retail banking developed into a business area of constantly increasing relevance to a commercial bank, this phrase has been used, exploited, and interpreted in many ways. Unfortunately, there exists no standard definition of retail banking and its related market in the general banking literature. In part because most banks include a slightly different set of activities under that heading. There are, however, certain characteristics that determine a typical retail banking business. Many authors, under the constraint of that imprecise category of activity, chose the approach of defining retail banking by pointing out its characteristics. The following definition is a typical example of that approach:

'Retail banking will mean a financial service or group of services offered through an institution to personal customers. Although primarily branch based, the category will include any method of delivering financial services to the personal customer'.<sup>15</sup>

Other authors merely talk about consumer banking without even specifying in detail its characteristics.

Retail banking activities tend to include all activities

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<sup>15</sup> Howcroft, J.B. / Lavis J., Retail Banking, New York, 1986, p.6.



that are not wholesale based, directed toward the private sector, and generally performed through a branch network. Typical retail banking business encompasses funds transfer, all kinds of credit and deposit services, and financial consulting. Banks themselves talk about the consumer banking function, and define that business by typical product lines offered. In Citibank's case for instance, the consumer business focuses on 'the broad middle market and serves the needs of customers through branches, cards, and mortgage financing'.<sup>16</sup>

For the purpose of this investigation, retail banking business, and hence the retail banking market for commercial banks, is defined in the sense of an operational definition as the set of banking utilities offered to private households. This set ranges from funds transfer utilities, all kinds of short and long-term consumer credit and deposit facilities, to financial services consulting.

The effort of a bank is generally market-driven but the engine to deliver new products or to enable smooth processing is information technology. It must therefore be regarded as an important factor for a modern commercial bank (see section 2.1.1). Hence it is necessary to have a crisp definition of IT, and concerning our hypothesis under

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<sup>16</sup> Citicorp, Strategies for the Nineties, New York, 1990.

investigation, a definition of the expression IT strategy in banking.

Information technology (IT) in this dissertation can be defined as the mix of equipment, methods, tools, and principles which are employed for the availability and utilisation of information within an enterprise to enable sound decision-making processes, and to subsequently meet corporate objectives. Based on this framework, IT encompasses the entire set of hardware, software, and orgware implemented to plan, organize, execute, and control the information function (defined as the recognition, storage, transformation, and transfer of data<sup>17</sup>). This is slightly different from the definition of an information system (IS) which covers a much wider area<sup>18</sup> including IT. Smith provides a detailed description of typical information systems and technology currently employed in

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<sup>17</sup> Wittmann, W., 'Information', in: Handwörterbuch der Organisation, ed. by Grochla, E., 2nd edn., Stuttgart, 1980, Sp.894-904.

<sup>18</sup> For other definitions of IS please see Amler, A.W., Analyse und Gestaltung strategischer Informationssysteme der Unternehmung: Ansätze zu einer Neuorientierung der Methodenkritik, Göttingen, 1983, pp.63; also Berthel, J., Betriebliche Informationssysteme, Stuttgart, 1975, pp.13; also Ippisch, W., 'Strategische Überlegungen zum Stellenwert neuer Informations- und Kommunikationstechnologien in der bankbetrieblichen Leistungsproduktion', in: Bankautomation und Bankmarketing, Schriftenreihe des österreichischen Forschungsinstituts für das Sparkassenwesen, 02/1986, p.21.

commercial banks operating in retail banking.<sup>19</sup>

A strategy functions as a methodology for operating a bank within a volatile market environment (in the case of this investigation the retail banking market), and for providing action plans to adjust to changes in this market environment. Hence, IT strategy in this dissertation means the aggregation of all IT activities, including internal application design processes, the purchase or rental of IT equipment from external organisations, as well as communication activities and related tools to adjust to a changing market environment. In light of the hypothesis under investigation, that a direct correlation exists between a change in the banks' market environment through the market-entry of nonbank institutions, and the banks' IT strategy, the aggregated cost of those IT activities that are clearly attributable to the strategic response of a commercial bank to such a market-entry, are taken as a measure to test the significance of a change in the banks' IT strategy. The level of significance is thereby assumed to be twenty percent or more of the budget devoted to IT expenditure and investments in the retail banking function of a commercial bank in the year of the banks' strategic response.

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<sup>19</sup> for an in-depth description of the retail banking technology see Smith, C., Retail banking technology: a practical guide to the information systems used in consumer banking, London, 1987.

If asked to describe their IT strategy in retail banking, many bankers immediately talk about electronic banking. This is understandable because electronic banking is generally employed to enhance the customer interface of a commercial bank. Bearing in mind what has been said already about typical characteristics of retail banking, for instance that it is directed toward the private sector, and the branch orientation of the delivery system, this way of thinking makes sense. Accordingly, a number of authors simply define electronic banking as a heading that includes all IT supported businesses between the customers and their financial institution.<sup>20</sup> But similar to the definition of retail banking, electronic banking is not precisely defined. The variety of definitions in the literature is large. A typical example is the following:

'Electronic banking systems are electronic systems that transfer money and record data related to these transfers. In effect, they entail the use of computers and communication lines to transfer funds without paper'.<sup>21</sup>

From the bank's perspective, typical definitions follow the line:

'Under the general heading of Electronic Banking, the latest electronic and telecommunication facilities are

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<sup>20</sup> please see Meyer-Spasche, G., Zahlungsverkehr mit dem PC, Haar, 1992, pp.15-17; also Benn, J., 'Electronic Banking', in: Innovationsmanagement in Banken - Herausforderung der 90er Jahre, ed. by Schuster, L., St.Gallen, 1985, p.76; also Straub, E., Electronic Banking, Die elektronische Schnittstelle zwischen Banken und Kunden, Bern, 1990, p.36.

<sup>21</sup> Lipis, A.H. / Marschall, T.R. / Linker, J.H., Electronic Banking, New York, 1985, p.7.

grouped which are used to offer existing services via new marketing channels, to create new ones and to place them at the disposal of its customers tailored to meet specific requirements'.<sup>22</sup>

According to our definition of IT, electronic banking represents a subset of IT and hence can be subsumed. However, in order to clarify its position within the set of information technologies used in a bank, it is useful to look at its orientation. Does it include more wholesale or retail banking orientated technology and information systems ?

In analyzing the above definitions several key characteristics of electronic banking are identifiable:

- self-service character (ie automated teller machines)
- automation of the customer interface (ie self-service terminals)
- internal and external funds transfer (ie EFTPOS utilities)
- telecommunications (ie home or telebanking facilities)

These characteristics show that electronic banking seems to be more widely used in the retail banking area. The services in parentheses indicate typical retail banking services that can be subsumed under these characteristics. Nevertheless, electronic banking also encompasses a whole range of IT activities in the wholesale and investment banking segment (ie Swift networks, external funds

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<sup>22</sup> Schweizer Bankgesellschaft, Technobank, 1986, p.1.

transfer, stock exchange communication etc.).<sup>23</sup>

It is not the aim of this study to further discuss electronic banking. It was included because many bankers used this expression at some point in time during the interviews, and for the sake of completion. It certainly has its justification in the wide area of information technology employed within banks. With regard to the research objective of this dissertation, however, it is only of minor importance. The elements of electronic banking that are retail banking oriented (as for instance some of the characteristics mentioned above), in recalling that this dissertation concentrates on the retail banking market only, are included in our definition of IT.

#### **2.1.2 The Strategic Relevance of IT**

As many interviews, surveys, and consultants' reports about the banking industry have shown, a large number of bank CEOs and CIOs, even today, cannot quantify their return on systems investment and the contribution of IT to

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<sup>23</sup> see Chorafas, D.N., Strategic Planning for Electronic Banking, London, 1987, Ch.1.

their company's success.<sup>24</sup> On the other hand, many of the existing banking products and services of a modern commercial bank, such as money market accounts, ATM-networks, and self-service centres emerged around an IT and IS infrastructure. Given the role and importance IT embodies for a commercial bank, that is an enormous contradiction. In a large number of banks - not the successful banks - IT still remains an unleveraged, inappropriately measured asset, which is not fully exploited.<sup>25</sup>

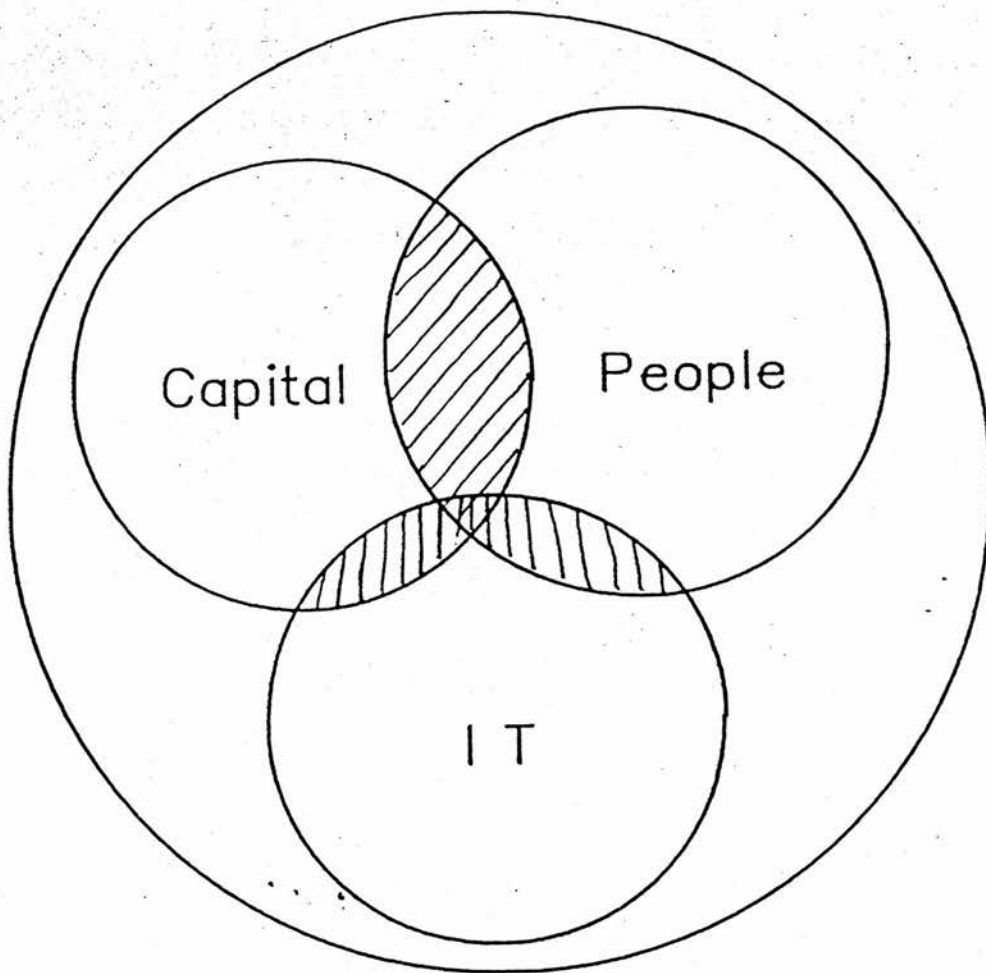
Bankers must realize that information technology has altered traditional business models in the world of banking. Traditional models contained essentially three factors of production, capital, human, and natural resources. The use of computer systems, application systems, and communications for the development, production, and delivery of products, particularly in the financial services industry, has changed that model by introducing a new element - IT. For a modern commercial bank, the new business model looks like the following diagram:

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<sup>24</sup> First Manhattan Consulting Group, Aligning FSI's Strategy With Key Trends and Their Impact on Systems Investments at Financial Institutions, Financial Services Industry Study, Aug. 1989.

<sup>25</sup> *ibid.*





\* natural resources have been subsumed under capital

**Figure 2: Business Model of a Modern Commercial Bank**

The pivotal role IT plays for a modern bank is also illustrated by the following example. Internal simulations within major banks have revealed that a breakdown of the main computer system with a downtime factor of four days, would bring a large commercial bank close to insolvency. The use and availability of information is crucial for a bank, or as Chorafas and Steinmann have noted:



" The modern bank is information in motion".<sup>26</sup>

Information systems and their underlying technology incorporate an ambivalent significance for a bank. They are not only an enabling tool that accelerates product development cycles, enhances service capabilities, provides opportunities to gain market share, and improves the efficiency of internal operations, they also pose constraints on a bank because of their potential application by competitors and dependency on vendors of IT. Both advantages and constraints affect the whole enterprise, and can only be answered from the firm's perspective by an appropriate change in corporate strategy. As a consequence, IT must be regarded as a core element of corporate strategy.

In more detail, IT provides the following key advantages and constraints to a commercial bank:

(a) **advantages:**

- IT can differentiate products & services and the company itself within the sector
- IT can overcome product obsolescence and generate new

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<sup>26</sup> Chorafas, D.N. / Steinmann, H., Implementing Networks in Banking and Financial Services, London, 1988, p.4.

products

- IT can create new markets or business segments
- IT can enhance the customer - institution relation in a given market and thereby building in switching cost
- IT presses for decentralisation of power
- IT can increase productivity of operations, modify the cost function, and subsequently build barriers to entry.<sup>27</sup>

Like all coins, there is always a flip side that has to be taken into consideration by bank managers dealing with IT. The technological revolution of the past decade has resulted in increasing differentiation of systems which are frequently incompatible with each other. This problem becomes even trickier because of cooperations and the integration of acquired institutions and their respective IT and IS infrastructure into the parent's systems. Investment in IT may be necessary to launch new products,

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<sup>27</sup> This list is leaned on de Carmoy's findings about technological constraints in global banking strategy. De Carmoy, H., Global Banking Strategy, Oxford, 1990, pp.10-11; also Diebold, J., 'Informationstechnik: Aufbruch in ein neues Zeitalter wirtschaftlichen Wettbewerbs', in: Zeitschrift für Organisation, 02/1987, pp.87-92, here p.87.

but it cannot guarantee increased sales. Furthermore, the introduction of new information technology creates additional fixed cost, and also depreciates the previously existing capital which still had production capability. Thus, information systems and technology should be managed and used strategically to balance advantages and constraints, and to identify success potential that ensures a long-term, and positive trend in business growth and profitability.

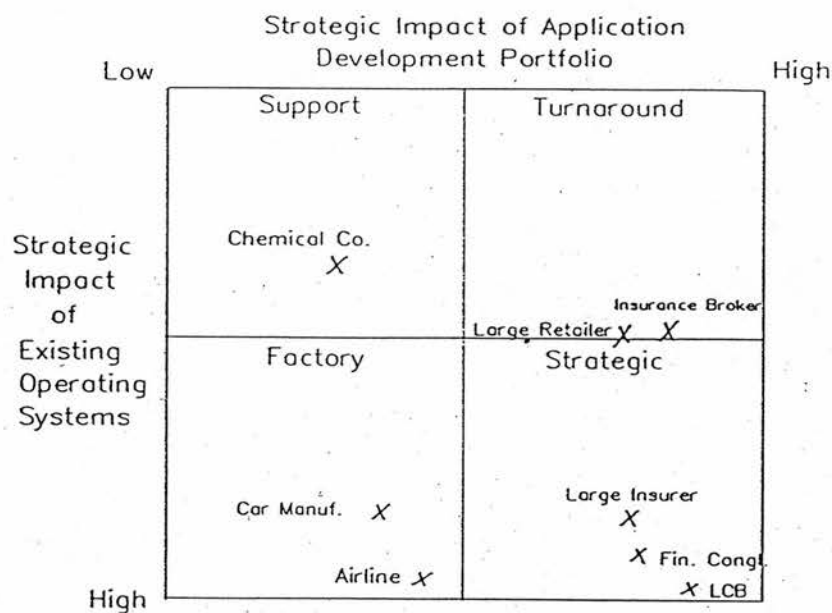
The importance of IS and IT for individual companies varies significantly, depending on the industry the company is based in. Strategic thinking and top management devotion to IT strategies is determined by that perception. In 1984, McFarlan developed his famous grid exploring the position of information systems in various types of companies.<sup>28</sup> In so doing, he identified four general roles of IS, a distinctly supporting role, a factory role, a turnaround role, and a strategic role. He ranked major US commercial banks in the strategic quadrant because they were critically dependent on the smooth functioning of the daily IT activities.<sup>29</sup>

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<sup>28</sup> McFarlan, W., 'Information Technology', in: Harvard Business Review, May/June 1984, pp.98-103, here p.101.

<sup>29</sup> For a detailed analysis of company's characteristics and the impact of IT in the other quadrants of the grid please see McFarlan, W. / McKenny, J. / Pyburn, P., 'The information archipelago - plotting a course', in: Harvard Business Review, Jan/Feb. 1983, pp.145-156.

However, McFarlan based his analysis on data drawn in the late 1970s and the early 1980s. With regard to the financial services revolution and the emergence of retailers, financial conglomerates, insurance companies, and other non- and near-banks as direct competitors for banks, whose success was largely dependent on the application of IT (ie Sears' customer databases that allowed a quick placement of typical banking products) requires adjustments of the matrix. Significant technical changes in IT performance, combined with the evolution of a new competitive environment, have repositioned many companies in the matrix. Figure 3 shows the strategic importance of IS for banks, and also for their direct competitors in the retail banking market.



**Figure 3: The Role of IS within Commercial Banks Relative to other Types of Companies**

**Source:** McFarlan, W., 'Information Technology', in: Harvard Business Review, May/June 1984, p.101

This matrix is a helpful tool for bank managers who have not realized the strategic importance of IT and IS for their organisations, to visualize their position and to recognize the position of direct competitors and their perception of the role of IS. The grid could also be used as a starting point for reconsidering IT strategies currently employed.

The strategic importance of IT to a major bank has also been stressed more recently by Chorafas and Steinmann, who identified an evolutionary relationship between IS and the product strategy. Both are strongly commingled, and neither remained stagnant over time. These authors found four generations of product strategy and their underlying, enabling information technology. Most banks, according to them, are now in the third generation, which is characterized by a network orientation as opposed to the stage of batch processing and private online systems (first generation), and the stage of cooperative online systems and electronic funds transfer (second generation).<sup>30</sup> The authors predict that the 1990s can only be mastered by the development of a fourth generation product strategy. Intelligent networks, that is computers and communication systems enriched with artificial intelligence (AI), electronic banking, and integrated computer networks

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<sup>30</sup> Chorafas, D.N. / Steinmann H., *ibid*, pp.2-5.

connecting with the environment, will be the backbone of the new product strategy.

The strategic importance of IT for a commercial bank can be substantiated by an earlier study (Porter and Millar, 1985)<sup>31</sup> which established the requirement that IT be a crucial component of any business strategy for an enterprise operating in a volatile market environment. Moreover, the authors found that IT can also substantially participate in the creation of a competitive advantage over rivalling companies.

In a study about the profitability of financial products and services and the underlying technology infrastructure, it was found that a bank operating in a highly competitive and dynamic marketplace (such as the retail banking market) can only survive by getting the products to the market first. To do so, fourth generation IT is required. Banks that neglect devotion to IT will ultimately lag behind and finally be driven out of the market.<sup>32</sup>

These findings relate to the relatively new concept of commercializing technology. A concept that evolved in the

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<sup>31</sup> Porter, M.E. / Millar, V.E., 'How information gives you competitive advantage' in: Harvard Business Review, July/Aug. 1985, pp.149-60.

<sup>32</sup> Chorafas, D.N. / Steinmann, H, *ibid*, 'Product profitability and information systems', p.9.

manufacturing industry, and is in the process of being transferred to the service industry. According to the concept, excellent companies view commercialisation as a core strategic discipline, in light of changes in the business environment, rapid technological innovations, and high IT cost. Commercialisation begins when a company identifies a way to use technological advances to meet a market need. It incorporates a significantly larger share of IT in their products than competitors and is ultimately able to shorten product development cycles and to compete in many product and geographic markets.<sup>33</sup> That is also happening in the retail banking industry. A good example is the uprise of financial conglomerates and superregional banks in the US banking market. Banks such as BancOne, Mellon Bank, or CoreStates recognized the strategic value of IT. A main similarity among them was that they did not differentiate between their business and technology.<sup>34</sup> Or as John McCoy, Chairman of BancOne has put it:

'Technology is driving strategy, it is not a cost centre. During the last 20 years technology has enabled BancOne to develop superior products and services'.<sup>35</sup>

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<sup>33</sup> Nevens, M.T. / Summe, G.L. / Uttal, B., 'Commercializing Technology: What the best companies do', in: Harvard Business Review, May/June 1990, pp. 154-163.

<sup>34</sup> compare Singhton, J.P., 'Technology gets Top Priority at Security Pacific', in: The Bankers Magazine, May/June 1991, pp.4-10.

<sup>35</sup> n.a., John McCoy, 'Managing Technology', in: Bank Management, Febr. 1990, p.14.

To indicate the strategic importance of technology for the organisation as in the above example, banks should also include IT and IS in their mission statements and corporate objectives. The following is an excerpt of Citicorp's mission statement:

'Citicorp's commitment to pursuing advancements in technology has been in existence for a long time. Even though the corporation does not consider itself a high technology company as in the case of IBM, it maintains that technology will pervade the financial services industry.

Inherent in this commitment is the establishment of the Corporate Technology Committee which is chartered with identifying and taking advantage of opportunities in telecommunication and data processing markets while maintaining a decentralized, line-driven management philosophy.

Furthermore, Citicorp recognizes that its customers will be looking for information based services on a global scale, and in order to respond, technology will become a major force.'<sup>36</sup>

This example illustrates that IT affects the entire organisation, and is also reflected in the corporate culture, management philosophy, and organisational structure. Citibank, for instance, acquired its own technology subsidiary, Quotron, to develop added-value software applications for a variety of business segments.<sup>37</sup> Other successful banks did the same, or teamed up with leading software houses.

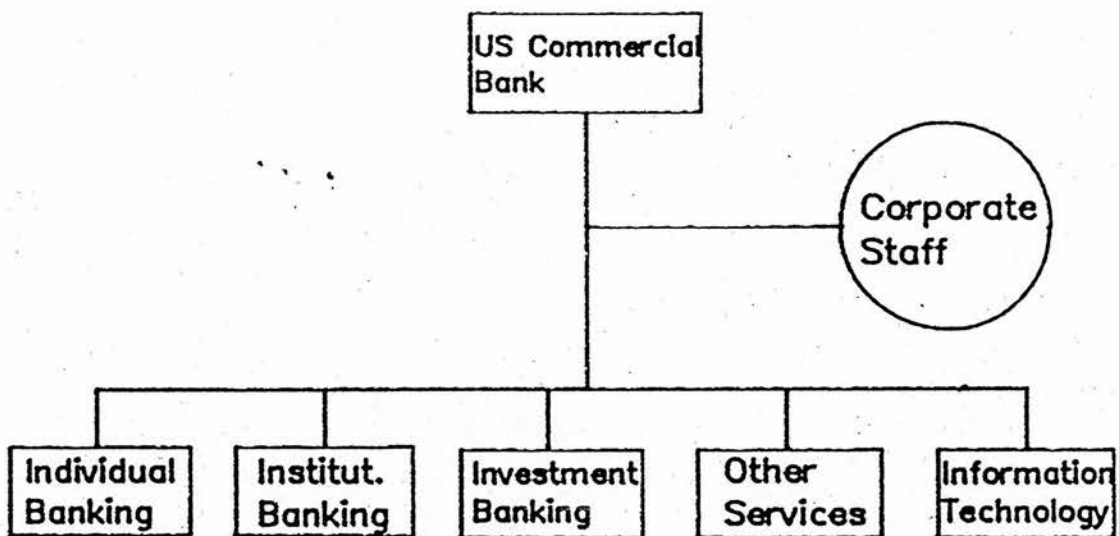
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<sup>36</sup> Citicorp, Mission Statement.

<sup>37</sup> Citicorp, Citicorp's Strategy for the Nineties, New York, 1990.



Not only mission statement and corporate objectives should incorporate IT, but the organisational structure of a modern commercial bank must also reflect the strategic importance of IT. Again, if one analyzes organisational charts of large and successful US commercial banks, the CIO (Chief Information Officer) is mostly a member of the Board of Directors. In a simplified structure, the following diagram illustrates the organisational chart of a typical US commercial bank.

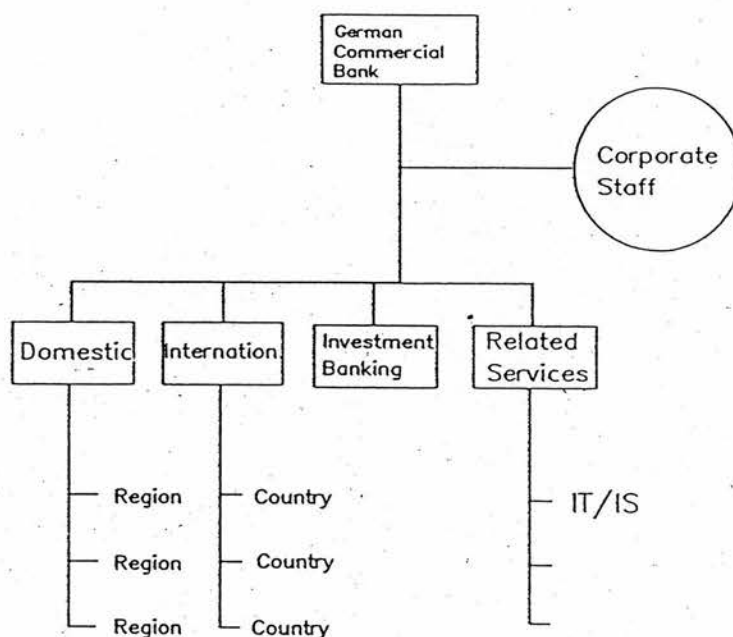


**Figure 4: Organisational Diagram of a Typical Large US Commercial Bank**

It is the concept of what is generally known as 'Eye-to-the-fifth-power' that characterizes the strategic importance of IT to those banks. This expression was

created in order to emphasize the increasing significance of the fifth function (compare the above diagram), the IS/IT function, for a modern commercial bank. Having a strongly developed and up-to-date IS/IT function is a crucial requirement nowadays.

German commercial banks, in turn, subsume IS/IT under an administrative function which could be labelled Related Banking Services. They are also broken down by geography, instead of by type of customer (Deutsche Bank as recently as 1991 has begun to change this structure). This form of organisation impedes a rigorous profitability analysis per customer and product line. Figure 5 shows the organisational chart of a typical West-German commercial bank:



**Figure 5: Organisational Diagram of Typical German Commercial Banks**



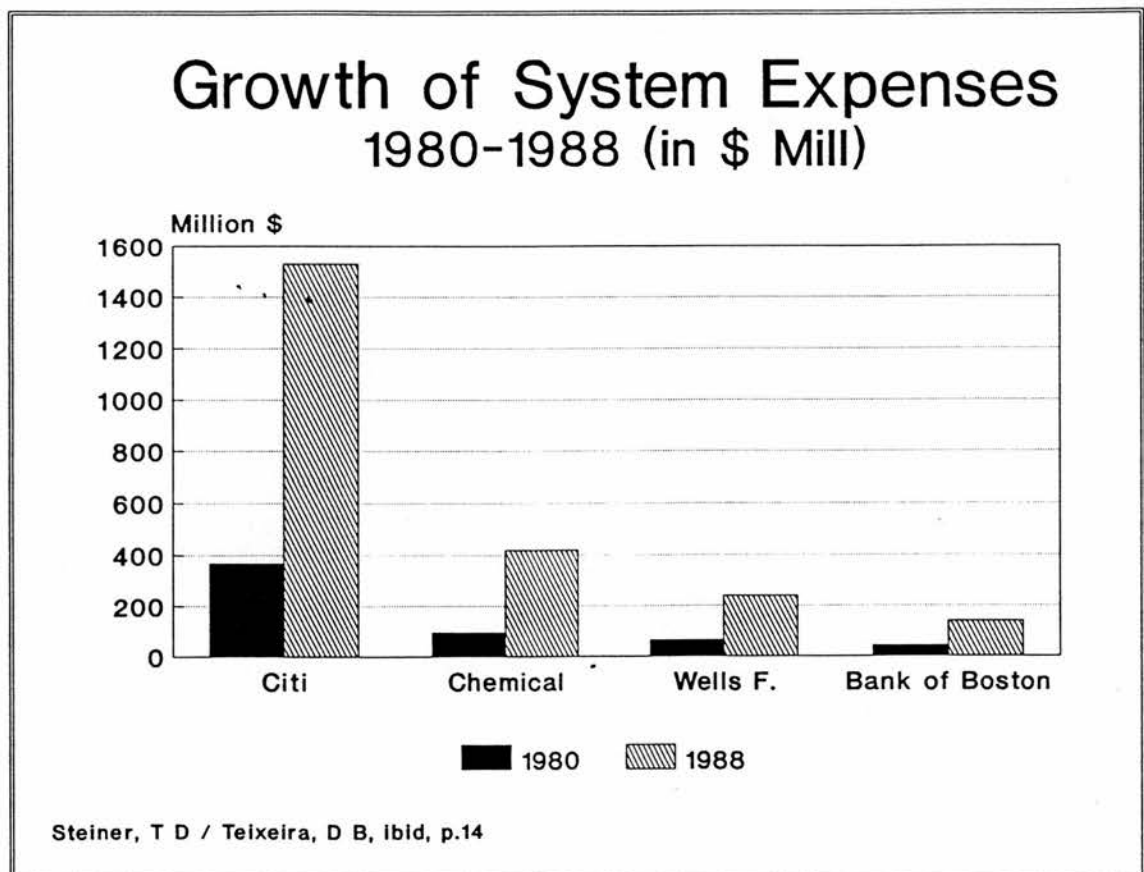
There exist a number of other reasons why IT should be placed very high in the organisation. The two most important will be briefly mentioned. One is the roll-out effect, and the other could be called cost control. The entire banking organisation should actively participate in the development and application of IT, in order to be able to use the future systems and procedures. If IT is situated too low in the organisation, the roll-out of new applications and the acceptance can be severely constrained. The organisation, in applying IT in its various forms of appearance in a bank can, secondly, optimize the utilisation of critical resources, redefine business processes leading to cost reductions, and enhance the market responsiveness of the entire organisation. A necessary prerequisite for that is the general recognition of all elements within a banking organisation that IT is crucial, and has to be supported by the whole organisation.<sup>38</sup> This objective can only be achieved through sufficient power of the IT function.

The most visible factor in analyzing the significance of

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<sup>38</sup> also see the findings of an MIT study on the management of the 1990s. Venkatraman and Henderson developed a strategic alignment model (SAM) that integrates all functions, processes, organisational infrastructures, and the business and IT strategy as a necessary premise for a successful company. Venkatram, N. / Henderson, J.S., 'IT Alignment with Business Strategy', in: An ICL briefing for Management on the Findings of the Management of the 1990s Research Program, London, 1990, pp.22-24.

IT to a commercial bank is the development of IS and IT expenditure. The execution of a strategy or the change of an IT strategy requires substantial investments in IT. An analysis of the spending behaviour therefore is a good indicator of the significance to a bank. In analyzing IS expenditures in the interval 1980-88 of four major US commercial banks, Citicorp, Chemical, Wells Fargo, and Bank of Boston, it was found that on average these banks increased their spending on IT by 4-5 times.



**Figure 6: Development of Systems Expenses**

Citicorp, for instance, increased its spending from \$366

million to \$ 1.530 million. The share of IT investment in the retail banking business thereby climbed up to roughly 60 percent.<sup>39</sup> This overall tendency indicates (a) the general importance IT has reached within large US commercial banks, and (b) the shift towards retail banking, and hence also the problem of dealing with a turbulent market environment, such as nonbanks entering the market.

The fact that IT requires growing capital investment - at least in the commercial banking industry - is also indicated by the findings of a cross-industry survey concerning IS budgets (see table 1):

**Table 1: Cross-Industry Survey of US Companies' IS Budgets**

Industry	IS Budget		Sales
	% of sales	Mil \$	Mil \$
Banks & Fin. Serv.	4.5	3904.4	86,968.2
Electronics	3.7	4839.8	131,274.4
Food & Nutrition	1.6	1657.1	104,334.3
Health & Pharma	0.6	270.6	48,789.5
Automobile	2.7	7432.4	273,394.5
Insurance	1.7	1678.5	100,115.5
Metal	1.1	495.0	45,083.3
Petrochemical	1.3	3312.3	261,875.1
Refinement	1.6	1572.8	99,029.9
Retailing	0.2	327.7	167,211.4
Transportation	1.3	712.7	54,994.5
Civil Service	1.0	1189.0	121,687.4

**Source:** Industry by Industry IS Survey, in: Datamation, 1/1987, pp.46-52

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<sup>39</sup> Steiner, T.D. / Teixeira, D.B., Technology in Banking, Creating Value and Destroying Profits, Homewood, Illinois, 1990, p.65.

The essence of the considerations about the strategic value of information systems and their underlying technology, as laid down in this section, is that commercial banks are aware of the strategic significance of IT for their organisations. This is reflected by increasing information system expense budgets throughout the previous decade. Hence, the option that a bank would not change its IT strategy in response to a significant change in its market environment, due to the fact that it does not regard IT as a significant success factor, can be eliminated.

### **2.1.3 Implications of Technological Innovations**

Apart from the more broad consideration of the previous section, that established the relevance of an IT strategy to a modern commercial bank which functions as an umbrella permanently impinging on the IT variable of the hypothesis under investigation, this section introduces another important influencing factor that has to be briefly discussed, in order to lay a proper foundation for this investigation.

The IT strategy of a commercial bank is also influenced by technological innovations, advancements, and breakthroughs. The critical question to be asked at this point, is whether an interdependent relationship between a bank's IT activities and investments and these technological

innovations is the predominant motive for a change in a banks' IT strategy. If this is the case, a commercial bank would only insignificantly react in terms of IT activities and related IT expenditure to a change in its market environment, such as the market-entry of nonbanks. IT investment activities would be tantamount to a mere cyclical change management to keep up with state-of-the-art technology.

Furthermore, with regard to the measurement process of the IT variable in our perceived correlation, that is a surge in IT investment, such a surge which follows for example a major product announcement of a leading IT vendor and a surge which follows a nonbank competitor incursion would be rather difficult to distinguish.

However, in light this situation it appears appropriate to first look at the substantial literature on the analysis of technological change and the diffusion of technology that developed over the past two decades, whether it can make a contribution to our particular research phenomenon in retail banking.

One of the most commonly noted empirical regularities in the field of diffusion of technology is the observation that the life path of technology evinces an S-shaped

pattern.<sup>40</sup> That means, it takes some time - after the introduction of a technological innovation - until that innovation starts being absorbed by the relevant industry. In general, the absorption rate accelerates in the following years until it reaches a saturation point and finally starts decreasing. In addition, technological change involves a learning process under uncertain conditions primarily in the first years after an innovation has been introduced to the market. Around these notions a whole array of articles, books, and case studies emerged on diffusion of technology. With regard to commercial banking and the diffusion of IT primarily two studies made valuable contributions. In 1991, Diederer, Kemp, Muysken, et alii analyzed the diffusion of process technology in Dutch banking.<sup>41</sup> In particular, the sort of technological change considered was innovations influencing the intermediary function of commercial banks in the payment system of the Netherlands. The authors created a diffusion model covering four techniques for handling accounts, back-office terminals, OCR (optical character reader) equipment, front-office terminals, and cash dispensers. In all cases, in which the saturation point in the S-curve had not been

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<sup>40</sup> Sahal, D., 'The Multidimensional Diffusion of Technology', in: Technological Substitution, ed. by Linstone, H.A / Sahal, D., Portland, 1976, pp.223-44

<sup>41</sup> Diederer, P. / Kemp, R. / Muysken, J., e.a., 'Diffusion of Process Technology in Dutch Banking', in: Diffusion of Technologies and Social Behavior, ed. by Nakicenovic, N. / Grübler, A., Laxenburg, 1991, ch.21



reached at the beginning of the time frame chosen for the investigation (1978-87), the absorption rate graphs showed a time lag of at least two years.<sup>42</sup> It was also found that the diffusion process of this information technology was best explained by competitive force and competitive pressure as the only variables. The authors concluded that technological change requires learning due to the fact that "the availability of a more profitable technology does not imply that it will be used immediately: different techniques will be employed each moment to produce a certain product. This is a consequence of phenomena, such as the limited capacity of individuals and organisations to process multi-type information, the balancing of current expenditure against uncertain future benefits, and the dependence of firm decisions on perceived reference groups".<sup>43</sup>

The more classic study on the diffusion of IT was conducted by Stoneman in 1976.<sup>44</sup> He analyzed the diffusion of computers and certain computer applications in a set of selected firms of individual industries by investigating their decision-making procedures with respect to IT absorption. One of the major results of his survey was that in many cases no evaluation for the installation of new IT kit took place. Another important observation was the outcome that among the reasons given for installing computers are some that refer to the inoperability of the

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<sup>42</sup>     ibid, pp.542-43.

<sup>43</sup>     ibid, p.544

<sup>44</sup>     Stoneman, P., Technological Diffusion and the Computer Revolution, Cambridge University Press, 1976.

previous equipment, such as replacement of worn out equipment, savings in office space, savings in manpower, and difficulty in recruiting staff.<sup>45</sup> Roughly one-third of the computers in the sample were primarily installed because the previous technology was no longer sufficiently operable. The author concluded, which was also restated in a more recent study, that

"the timing of the technique choice decision is determined for the firm by the interaction of its goal formulation and goal achievement characteristics".<sup>46</sup>

Thus, the key result of these studies is that there exists a certain time lag in the absorption of new IT, that the absorption is influenced by the business objectives and strategy of the company involved in the decision-making process, that about one-third of the IT expenditure is spent 'just to keep the company going', and finally that a clear reasoning of the prime trigger of IT expenditure could not be identified.

Hence, it appears necessary to analyze the launch dates of important IT product and services offered specifically to the retail banking industry in the past years by a leading IT vendor (in this case IBM) and commercial banks' reaction to it to gain further insights into this

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<sup>45</sup>     ibid, ch.6 survey results.

<sup>46</sup>     Stoneman, P., The Economic Analysis of Technological Change, Oxford University Press, New York, 1983, p.141.

phenomenon. This allows us to work out the response time between a product launch and the take-up, which means IT expenditure, by the commercial banking industry. The following table shows the market launch and installation figures, over a period of twenty-one years, of two important IT solutions in the area of retail banking: firstly, the market introduction of the IBM 3600 front office automation solution, consisting of the 3601 processor and the 3604 terminal system, and secondly, the IBM 3614/24 cash dispenser and ATM (automated teller machine).<sup>47</sup>

	<b>3601</b>	<b>3604</b>	<b>3614/24</b>	
<b>1970</b>	5	75	-	<-----launch
<b>1971</b>	27	98	-	
<b>1972</b>	36	145	-	
<b>1973</b>	45	223	-	
<b>1974</b>	101	582	-	
<b>1975</b>	232	1394	-	<-----launch
<b>1976</b>	362	2356	0	
<b>1977</b>	610	4167	5	
<b>1978</b>	790	6321	35	
<b>1979</b>	1036	8771	75	
<b>1980</b>	1341	12208	165	
<b>1981</b>	1429	15454	213	
<b>1982</b>	1368	18982	397	
<b>1983</b>	1215	18475	667	
<b>1984</b>	1098	17682	952	
<b>1985</b>	980	17094	1193	
<b>1986</b>	734	15631	1259	
<b>1987</b>	378	13096	1278	
<b>1988</b>	136	11678	1293	
<b>1989</b>	116	10275	1256	
<b>1990</b>	94	8400	1138	
<b>1991</b>	52	7115	1084	

**Table 2: IBM-own Installation Figures 1970-91**

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<sup>47</sup> The following figures are extracted from IBM Germany's internal installation records.

As this table illustrates, the IBM 3601 processor and terminal system (IBM 3604) was introduced in 1970. A necessary prerequisite for the smooth functioning of the system was the installation of IBM's SNA (System Network Architecture) which required additional software purchases. However, it took 5 years until the banking industry accepted this system, which is reflected by the installation figures of 1975.

A similar time lag occurred regarding the market launch of ATMs. The above installation figures of IBM's 3614/24 demonstrate that it took the German banking industry at least 4 years (1975-79) to respond on a larger scale to this innovation.

The extremely low installation figures, almost negligible from IBM's perspective, of the first four years after the market launch indicate the banks' attitude to test the new technology before investing heavily in it. Hence, the purchase of new technology for the purpose of gaining familiarity with it, did certainly not lead to a significant increase in IT investment.

These examples can be supplemented by two additional major product launches relevant to the retail banking industry. In the German market, IBM in 1989 introduced the POS (point-of-sale) banking solution called EC-Cash, which

is based on the magnetic stripe technology of the EC (eurocheque) card. By then, all required hard- and software components such as card readers, microcode to control the system, security devices within the network, and the network itself were available. However, even today (the end of 1992) none of the commercial banks has invested into this promising technological innovation.

Similarly, relational database technology was launched into the market in 1979/80 (ie IBMs DB2 technology). Commercial banks responded to this innovation, according to IBM's own sales records, 6 years later in 1985/86.<sup>48</sup> Hence, a response lag of more than 4 years was also observable in this case.

These findings suggest that the commercial banking industry seems to have been extremely cautious concerning capital investment into new information technology. This confirms the results of the two studies mentioned above. A time lag of at least 4 years is observable.

However, the above findings automatically raise another question. Is the observed time lag of four years really abnormally long ? Or, is this response time a standard time horizon required by large commercial banks to absorb new

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<sup>48</sup> Also compare Fiducia's DB2 activities presented in section 4.4.1.

technology ? Providing a sufficient answer to these questions can only be done by analyzing other major product launches targeted at the retail banking industry that were of comparable magnitude to those mentioned above. The following table provides valuable information on the market launch of IBM's 4700 branch automation system series and the take-up process by the banking industry.

	<b>4701</b>	<b>4704</b>	<b>4721</b>	
<b>1982</b>	24	44	-	<-----launch
<b>1983</b>	1315	4768	-	
<b>1984</b>	2721	10123	-	
<b>1985</b>	4328	15932	-	
<b>1986</b>	4578	19363	10	<-----launch
<b>1987</b>	4225	24103	394	
<b>1988</b>	3904	27138	1756	
<b>1989</b>	3357	26852	3002	
<b>1990</b>	2825	26533	4321	
<b>1991</b>	2376	25712	4986	

**Table 3: IBM-own Installation records 4700 series**

As these records indicate, the branch automation components 4701 and 4704 were both launched to the market in 1982. The take-up process by the banking industry started in 1983 and strongly gained momentum in 1984. Similar to the development in table 2, these figures indicate a S-shaped pattern. In contrast to the market introduction of the technology mentioned in the previous table, the response lag was approximately two years. Hence, a substantial take-up time differential seems to exist. Similarly, the retail

banking industry responded to the launch of the 4721 self-service component. This front-end banking system was introduced in 1986, and was strongly absorbed by commercial banks roughly two years thereafter. These innovations were of comparable magnitude to the banking industry as those launched in 1970 and 1975. However, it took the banking industry approximately two until two-and-a-half years to absorb the above technology.

Another major technological innovation, the market launch of automated cheque truncation facilities in 1985<sup>49</sup>, also seems to support this phenomenon. The following table indicates the growth of cheque truncation in the German savings bank sector.

<b>Year</b>	<b>No. of trunc. cheques</b>	<b>% of all cheques</b>
1986	42.4 Mio	15.9
1987	95.8 Mio	38.1
1988	122.3 Mio	42.1
1989	137.0 Mio	46.8

**Source:** German Savings and Giro Association, Annual Report, various issues, ch.6

**Table 4: Growth of Cheque Truncation in Germany**

Automated cheque truncation facilities were launched to the market in 1985. They consist basically of three components, a storage element, an optical character reader, and

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<sup>49</sup> n.a., BIK Report, No.3, November 1992, pp.1-12, here p.1

controlling software. As the above table indicates, banks in 1987 more than doubled the truncation of cheques within the payment system which was only achievable through substantial investment in cheque truncation technology. In the first half of 1988, roughly two-and-a-half years after the market launch, the market of optical character readers almost reached a saturation point.<sup>50</sup>

As a consequence of these findings one can conclude that the speed at which the technology laid down in table 2 was implemented seemed to be abnormally long. It can be further concluded - if both tables are analyzed as a totality - that there is a certain absorption lag for new technology introduced to the retail banking industry. This lag appears to be at least 2-2.5 years. With regard to our hypothesis, that a direct correlation exists between a significant change in the market environment for commercial banks due to the market-entry of nonbank competitors, and a significant change in the banks' IT strategy (which is measured by their IT spending), one could reckon that a surge in the IT budget should be recognisable much faster. It has to be shown throughout the dissertation whether such a quick response exists or not.

In further analyzing IBM's sales records, certain

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<sup>50</sup> IBM Germany, unpublished Market Analysis Banking Industry, 1990



regular sales of CPUs (Central Processing Unit), storage devices, and peripheral devices are observable - primarily in large account segments such as commercial banks - in line with standard depreciation periods, or because of requirements to cope with constantly growing data and transaction volumes. In such a case, a clear interdependence between IBM's market launch of for instance a new mainframe version, or an upgrade model (roughly every second consecutive year), and banks' IT investments is identifiable. But investment in this kind of IT equipment on a cyclical basis, despite the fact that it eats up substantial amounts of IT budgets, is a mere business requirement to cope with daily operations. It is an 'enabler' to keep the company going. Due to the fact that these kinds of IT investments occur on a regular basis, they can be perceived as a 'constant'. Funds are regularly planned, allocated, and spent. In a recent study about the business value of computers Strassmann made a similar observation. He stated that "mainframe computers and their relevant upgrades are justified and planned as production and process control tools. They were not included in direct information technology cost."<sup>51</sup>

Although a certain interdependence between technological innovations (ie new hardware upgrades or software versions)

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<sup>51</sup> Strassmann, P.A., The Business Value of Computers, New Canaan, Connecticut, 1990, p.25.

and the IT strategy of a commercial bank cannot be entirely rejected, the key finding of this section, that a time lag of at least 2-2.5 years seems to exist between the market launch of innovative information technology and commercial banks' investments in IT, suggests that this interdependence - with regard to the retail banking industry - appears to be rather weak.

What remains to be analyzed in part 2 of this dissertation is whether a substantial change in the competitive market environment can be identified as the ultimate trigger of substantial IT activities within a commercial bank.

## **2.2           The Regulatory Framework for Banks and Nonbanks               in the US and Germany**

### **2.2.1        Commercial Banks and the Banking System**

#### **2.2.1.1     The US Banking System**

"There is no hope for us in the American system; its very essence and principles are faulty"  
(Walter Bagehot, Lombard Street, 1873)

This famous observation on banking in the US, particularly the regulation of banks, made by Bagehot is still valid. The American banking system is one of the most

fragmented and complex; it stands in sharp contrast to many of the banking systems of Western Europe and the Pacific Rim. A set of banking laws passed by both states and federal regulators during two centuries of bank supervision and control has led to a network of partly overlapping, and therefore confusing regulations. This system inherently depends on the American perspective of a society based on the principles of individualism and federalism.

Commercial banking in the US is shaped by two basic principles. Firstly, the concepts of dual banking and separation banking directly applicable to banks, and secondly, regulations specifically aimed at corporations owning banks and their affiliates.

The concept of dual banking, a development of the so-called 'free banking era' of the early 19th century<sup>52</sup>, was officially established through the passage of the National Banking Act of 1864.<sup>53</sup> Under this act, a bank may be chartered either as a national (that is federally licensed) bank, or by one of the state banking authorities, under the

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<sup>52</sup> compare Savage, D.T., 'American Banking: The Early Years', in: Banking in America and the EEC, 1980, pp.1; also, MacKenzie, K., The Banking Systems of Great Britain, France, Germany, and the United States of America, London, 1960, pp.203.

<sup>53</sup> Kroos, H.E. / Samuelson, P.A., Documentary History of Banking and Currency in the United States, vol.2, Chelsea, 1969, pp.1355.

relevant state banking law, as a state licensed bank. The National Banking Act established a new department of the US Treasury, the OCC (Office at the Comptroller of the Currency), an office specifically charged with the supervision of national banks and the administration of this act.<sup>54</sup> The Comptroller has no authority over state chartered banks. Thus, the US banking system clearly differentiates between two types of banks, a system that is unique in the financial world.<sup>55</sup>

The concept of separation banking, institutionalised through the Glass-Steagall Act of 1933<sup>56</sup>, provided for the separation of commercial and investment banking. This act explicitly bars a bank engaged in the securities business from receiving deposits.<sup>57</sup> It was a legislative response to the large number of bank failures during the great depression of the 1930s. The Glass-Steagall Act was responsible for the structure of banking in the US, which is characterised by a variety of different types of banks engaged in clear-cut business activities, resulting in a

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<sup>54</sup> Puckler, G., Das Bank- und Börsenwesen in den USA, Frankfurt, 1986, pp.12.

<sup>55</sup> For a more in-depth synopsis of the US banking system: Clair, R. / Tucker, P., 'Interstate Banking and the Federal Reserve: A historical perspective', in: Economic Review, Nov. 1989, pp.2.

<sup>56</sup> The Banking Act of 1933, June 16th, 1933.

<sup>57</sup> The Banking Act of 1933, sect.21.

high degree of specialisation.

A considerable portion of US banking law, including some of the most onerous requirements for non-US banks, involves not the governance of banks themselves, but their holding companies and holding company affiliates. Since all large banks, whether national or state-chartered, are organised in a holding company structure<sup>58</sup>, banking authorities - especially the Board of Governors of the Federal Reserve System (FRS) - exercise a great influence. This influence is given through the administration and application of the BHCA (Bank Holding Company Act) of 1956 and its amendments.<sup>59</sup>

The BHCA, inter alia, defines a commercial bank as ... 'any institution organized under the laws of the United States, the District of Columbia, any territory of the US, ... which (a) accept deposits that the depositor has a legal right to withdraw on demand, and (b) engages in the business of making commercial loans'...<sup>60</sup>. Thus, under current US banking law, only the simultaneous engagement in both the deposit and commercial lending business

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<sup>58</sup> Chubb, J. / Kelly, E.J. / Quarles, R.K., 'United States, Report on Banking in the US', in: International Financial Law Review, Supplement, Nov. 1989, pp.66-75, here p.67.

<sup>59</sup> The BHCA of 1956, 12 U.S.C., §1841

<sup>60</sup> Section 2(c) of the BHCA.

constitutes a bank.

Banking supervision and control in the US is highly fragmented and complex. Throughout American banking history, no single government authority has ever been entrusted with regulatory power over all types of banks. As a result, 50 state bank departments and three federal regulators pursue very similar, and partly overlapping regulatory policies concerning depository institutions:

- (a) to avoid the risk of systematic bank failures and the insured depository system
- (b) to promote competitive and efficient capital markets
- (c) to promote partiality in the granting of credit
- (d) to prevent an extension of the safety net to nonbanking activities
- (e) to protect fair and sound dealing among credit institutions<sup>61</sup>

As already mentioned, there are different types of banks stemming from the dual banking concept:

- national banks (federally chartered; most money centre banks)
- state banks (state charter; not a member of the FRS and the FDIC)

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<sup>61</sup> Greenspan, A., 'Innovation and Regulation of Banks in the 1990s', in: Federal Reserve Bulletin, Dec. 1988, p.783.

- state member banks (state charter; member of the FRS)
- nonmember insured banks (state charter; member of the FDIC but not the FRS)

The supervisory responsibilities of commercial banks depend on the type of charter as illustrated in the following table:

C O M M E R C I A L   B A N K S			
Supervisory Function	Type of Bank		
	National	State-member	State-non-member
Passage of Regulations	FRS, OCC, FDIC	FRS, OCC, State Dept.	FRS, FDIC, some State Dept.
Deposit Insurance	FDIC	FDIC	FDIC(some banks)
controlled by	OCC, FRS, FDIC	FRS, FDIC, State Dept.	FDIC(some banks) some State Dept.
licensed by	OCC	State Dept.	State Dept.
Authorisation of M & A	OCC, FRS	FRS, State Dept.	FDIC(some banks) State Dept.
Authoritative federal laws	Nat.Bk.Act Bk.Mer.Act BHC Act Fed.Res.Act FDIC Act	Fed.Res.Act FDIC Act Bk.Mer.Act	FDIC Act Bk.Merger.Act

Abbrev: OCC = Office of the Comptroller of the Currency  
 FDIC = Federal Deposit Insurance Company  
 FRS = Federal Reserve System

**Table 5: Supervision Responsibilities for US Commercial Banks**

The above table identifies the Board of Governors (BoG) of the FRS, the FDIC and the OCC as federal regulators. The supervisory function of the FRS is restricted to member banks. The Federal Reserve Act of 1913, that established the FED system in the US<sup>62</sup>, requires mandatory membership for all national banks, whereas membership for state banks was left optional.<sup>63</sup> As already mentioned earlier, federally licensed banks submit to supervision with the OCC. The last supervisory body, the FDIC, was founded in 1933<sup>64</sup> to ensure 'depositor protection and to stabilise the banking system'. Virtually all commercial banks regardless of the type of charter are members of the FDIC. The following diagram illustrates the network of regulations and supervisory authorities in the US.

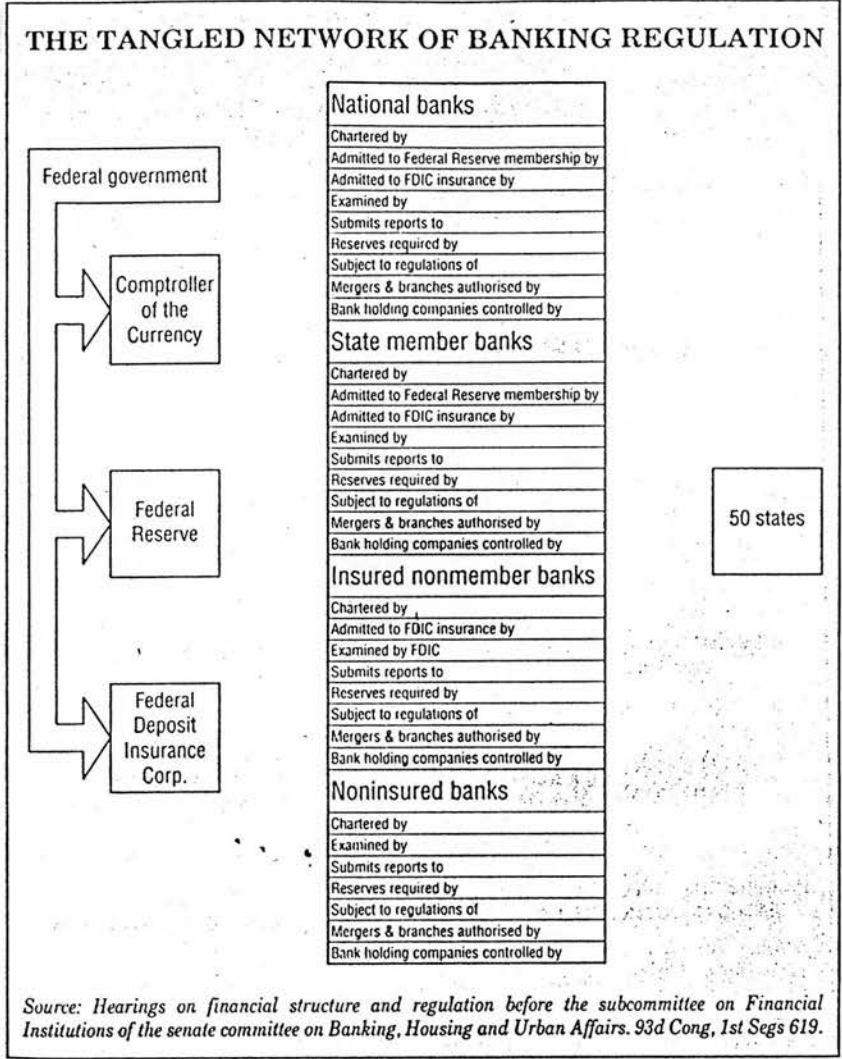
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<sup>62</sup> Federal Reserve Act, Dec. 1913, sect.2,10.

<sup>63</sup> Federal Reserve Act, sect.11; also Guenther, H., Banking in North America, London, 1987, p.67.

<sup>64</sup> Federal Deposit Insurance Corporation Act of 1933.





**Figure 7: The Tangled Network of Banking Regulations in the US**

To date, roughly 13,400 commercial banks operate in the marketplace. They are categorised into three groups according to their balance sheet totals. A commercial bank belongs to the group of money centre banks if its balance is greater than \$10 billion, and is located in one of the money centres in the US (for instance New York, California,

Texas). Banks with a balance between \$10 billion and \$1 billion are called regional banks. Those with less than \$1 million are identified as local commercial banks.

With regard to the business activities of commercial banks, those were traditionally restricted to 'accepting funds for safekeeping, issuing notes, granting credits and making payments to a third party on behalf of a customer'.<sup>65</sup>

However, over time commercial banks started diversifying - within the regulatory limits - into real estate, consumer finance, brokerage finance, and trust business. Their refinancing is generally performed via sight deposits, savings deposits, certificates of deposits, bank accepts, and debentures.<sup>66</sup>

#### **2.2.1.2 The German Banking System**

In contrast to the separation banking system in the US, the separation of functions (as a matter of banking law) is not found in Germany. The prevailing type of bank, whether incorporated under private (private commercial banks) or

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<sup>65</sup> Ludke, J., The American Financial System, Boston, 1969, p.157.

<sup>66</sup> Cooper, K. / Fraser, D.R., Banking Deregulation and the New Competition in Financial Services, Cambridge Mass., 1984, p.13.

public (savings banks) law, are universal banks. They are permitted to offer the full range of commercial and investment banking products, as well as securities investment<sup>67</sup>, underwriting, or cross-industry shareholdings.

The universal banks consist of three main categories:

- private commercial banks
- savings banks with their regional clearing institutions and a central institution
- cooperative banks, which are organised similarly to the savings bank sector<sup>68</sup>

Originally, savings banks were engaged solely in the taking of savings deposits, and real estate lending, whereas cooperative banks focused primarily on providing medium and short-term lending - traditionally only to their members - to the farming and rural community. Since the early 1980s, however, they have been providing more or less the same all-around financial services as private commercial banks.

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<sup>67</sup> According to the Savings Bank Act (Sparkassengesetz), savings banks are not allowed to invest in equity securities for their own account.

<sup>68</sup> For an in depth analysis of the German universal banking sector compare Obst, G. / Hintner, O., Geld-, Bank- und Börsenwesen, 38th edn., ed. by Kloten, N. / von Stein, J.H., Stuttgart, 1991, pp.183; Jählig, A. / Schuck, H., Kreditgeschäft, 5th edn., Wiesbaden, 1989, pp.21.

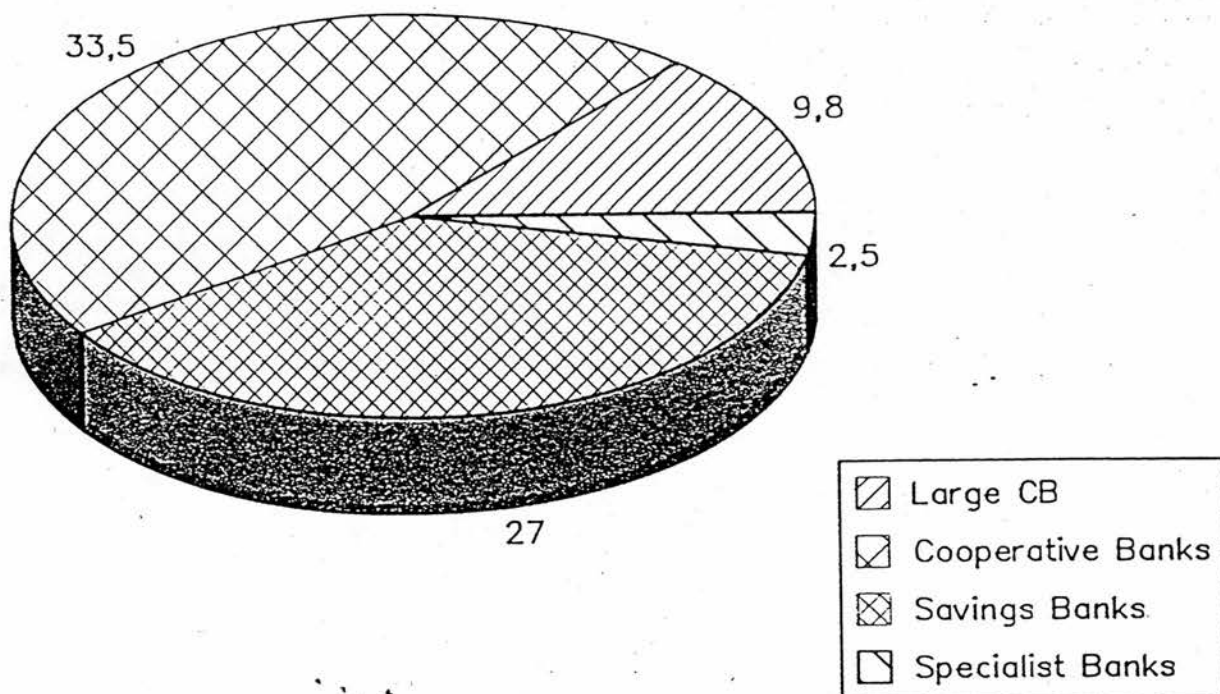
In addition to the universal banks, several groups of specialist banking institutions exist which provide particular banking services only. The most important are the mortgage banks (Hypothekenbanken), instalment finance banks (Teilzahlungs-Banken), postal savings banks (Postsparkassenämter), thrift banks (Bausparkassen), and investment companies.<sup>69</sup> Those institutions generally compete only in their specialist area with the universal banks, except for the thrift banks and postal savings banks, which have made substantial inroads into traditional commercial banking business (see part 2 of this dissertation).

The group of commercial banks, and particularly the large clearers, which is in the centre of the investigation comprises of four categories: large branch banks (Deutsche Bank, Commerzbank, Dresdner Bank), regional banks, branches of foreign banks, and private bankers.<sup>70</sup> These three large branch banks offer their full range of services on a nationwide basis. They also have a strong position in brokerage services, underwriting, trade finance and the like. However, with regard to the retail banking market within the universal banking sector, their market share is only about 10 percent.

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<sup>69</sup> Schneider, H. / Hellwig, H.J. / Kingsman, D.J., The German Banking System, 4th edn., Frankfurt, 1986, p.14.

<sup>70</sup> Obst, G. / Hintner, O., *ibid*, p.187.



**Source:** Bundesbank, Monthly Report, August 1990, pp.32-

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**Figure 8: Market Share Distribution in the German Retail Banking Market**

The regional banks include all other banks organized as stock corporations. Most of them operate in a specific region of Germany, but there also exist a few super-regional banks which are characterized by both a strong home base in a certain part of Germany (ie. Bavaria) and a thin national branch network. Branches of foreign banks are

primarily located in the main financial centres, such as Düsseldorf or Frankfurt. But because of the thrust of the dissertation, which lies on the German banks only, they will not be dealt with on the following pages.

The final group of universal banks are the private bankers. They are organised as general or limited partnerships,<sup>71</sup> and often operate in a highly specialised business area, mostly related to the investment banking business. In terms of market share in commercial banking, this group of banks ranges around one percent<sup>72</sup>. Therefore, in terms of market power in the retail banking market, they are negligible.

In Germany, commercial banks are subject to supervision and regulation according to the Kreditwesengesetz (Banking Act). This act does not include a concise definition of what constitutes a bank. Instead, §1 of the Banking Act (KWG) specifies a set of banking businesses, which, if carried out on a sufficiently large scope, require a commercially organised institution. These institutions are called banking institutions. The banking businesses laid down under §1 KWG include the following:

1. deposit business

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<sup>71</sup> Schneider, H. / Hellwig, H.J. / Kingsman, D.J., *ibid*, p.19.

<sup>72</sup> *ibid*, p.21.

2. credit business
3. discount business
4. securities business
5. custody business
6. investment business
7. acquisition of claims in respect of loans prior to their maturity
8. guarantee business
9. giro business<sup>73</sup>

However, this list of banking business activities does not include other financial transactions such as factoring, brokerage, or forfeiting, which are frequently conducted by at least the large German branch banks. In so doing, these transactions would not require a banking licence or supervision, because they are not part of the activities that constitute 'banking business'. Section 1 of §1 KWG, because of that situation, incorporates a clause that empowers the Federal Minister of Finance to define by regulation certain financial activities as banking business.

The Bundesaufsichtsamt für das Kreditwesen (Banking Supervisory Office), based in Berlin, officially supervises all banking institutions. Its functions are twofold, namely (1) to supervise the operation of banks and (2) to prevent abuses and malpractice in the banking system in order to ensure depositor protection<sup>74</sup>. The Banking Supervisory Office is also the licensing agency for all banks, and has

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<sup>73</sup> §1 Kreditwesengesetz as of July 11th, 1985.

<sup>74</sup> §6 (1), (2) of the Kreditwesengesetz.



as such defined rights of information, investigation and intervention. Pursuant to §32 and §33 of KWG, a banking license may be granted to everybody unless one of the necessary requirements enumerated in the KWG cannot be fulfilled. These requirements are (a) the adequate capital necessary for the operation is not available within Germany (currently DM 6 mill.)<sup>75</sup>, (b) the bank does not appoint at least two managers, (c) the managers are not reliable, (d) the managers are not professionally qualified to run the bank, and (e) the application for the licence is not accompanied by a business plan.<sup>76</sup>

The Kreditwesengesetz requires that the supervision is conducted by two bodies, the Bundesbank (Federal Bank) and the Banking Supervisory Office<sup>77</sup>, working in close cooperation.

The commercial banks are subject to submit certain reports on a monthly basis directly to the Bundesbank. Examples are issues regarding equity capital, liquidity,

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<sup>75</sup> § 10 KWG

<sup>76</sup> §33 of KWG in tandem with §35, §36 of KWG; also for a more detailed description Obst, G./ Hintner, O, *ibid*, pp.228-232; Schneider, H. / Hellwig, H.J. / Kingsman, D.J., *ibid*, pp.64-69.

<sup>77</sup> §7 KWG



provisions for bad loans and the like.<sup>78</sup> Others are directly filed with the Supervisory Office. Both agencies generally undertake investigative steps in a joined action. However §44 of KWG specifies certain exclusive rights for the Supervisory Office to conduct examinations.<sup>79</sup>

### **2.2.2 Distinction between Banks and Nonbanks in both Countries**

The intensity of the explaining variable in both countries, non- and nearbank entry activity level into typical retail banking business, is determined by national banking regulations. To be more specific, the legal definition of what constitutes a bank, products and services not permitted for nonbanks to be offered, and the resulting implications on the market-entry potential of those non-and nearbank competitors have to be discussed in this context. In light of that fact, the regulatory framework for banks and nonbanks will be analyzed in both countries. This will enable us to identify differences in the competitive situation, and to assess potentially different starting positions for US and German nonbank competitors.

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<sup>78</sup> §14,24,26 KWG and §18 Bundesbankgesetz (Federal Bank Act).

<sup>79</sup> §44 KWG; for a more detailed description: Jährig, A./ Schucke, H., *ibid*, pp.56-57.

### 2.2.2.1 Regulatory Distinction in the German Market

§1 of KWG, as discussed in section 2.2.1.2, defines the legal requirements of a bank, and enumerates nine types of banking activities that specify a bank. Performing at least one of those activities qualifies for a banking licence and hence supervision. Specifically exempted from that regulation and supervision - pursuant to §2 of KWG<sup>80</sup> - , are the Bundesbank, the Federal Post Office, privately and publicly incorporated social insurance companies, and social security authorities (with regard to its savings banks and giro operations). As a consequence of that clear-cut definition, the nonbank sector is clearly differentiated from the banking sector.

Regardless of the banking activities laid down under §1 of KWG, some of the exempted institutions listed under §2 of KWG do offer specific banking products. But due to the fact that they are either supervised elsewhere (ie. social insurance companies), or the banking business does only represent a negligible part of their typical portfolio of businesses, they are qualified as specialist banks. Thus, they also belong to the banking sector -in a wider sense - and are clearly differentiated from the nonbank sector under German law.

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<sup>80</sup> §2 KWG.

With regard to the relevant market for banking products and services, again, §1 of KWG explicitly defines that. However, a market cannot be solely isolated by legal definitions. It is the consumer that ultimately determines what kind of product he/she requires to satisfy a need. Based on that assumption, a market also consists of all products and substitute products that can be demanded by consumers to satisfy their needs.<sup>81</sup> As a result, the relevant market for banking products and services encompasses the legally specified services, as well as all services that represent a close substitute to them.

As a matter of fact, the German Banking Act does not restrict market-entry geographically, unlike the US counterpart. Large German commercial banks are allowed to open branches or representative offices on a nationwide basis, assuming that they fulfil the required endowment capital<sup>82</sup> and personnel objectives. The one and only exception within the universal banking sector are the savings banks. Most of them are incorporated under public law and owned by municipalities and districts. The Federal Supervisory Office remains the prime supervisory body, although a supplementary supervision function is performed

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<sup>81</sup> Bain, J.S., Industrial Organisation, 2nd edn., New York, 1968, pp.6.

<sup>82</sup> §10 of KWG, to date, requires DM 6 mio to establish a new bank. After 1992 that amount will be ECU 5 mio, or roughly DM 10 mio.

by the federal state ministry (Länderministerium) of the state the savings bank is based in.<sup>83</sup> The establishment of savings banks, in general<sup>84</sup>, is a matter of state law. So they are only permitted to operate and expand within their respective territory (ie. region or district). Similar regulations exist for all commercial banks in the US, a situation that will be discussed in the following section.

#### **2.2.2.2 Regulatory Distinctions in the US**

According to the definition of a bank (see section 2.2.1.1) as an organisation that is involved in gathering deposits and granting commercial credit, which represents a strict and exclusive right only attributable to commercial banks, the US banking legislation - to date - also institutionalises the characteristic features that constitute a bank. The only difference to the German system is that the KWG lists nine business activities, whereas the Glass-Steagall Act requires that only the simultaneous engagement in the two basic functions mentioned above qualifies for a bank.

Apart from that distinction which was enacted in 1933,

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<sup>83</sup> Büschgen, H.E., Bankbetriebslehre, 2nd edn., Wiesbaden, 1989, p.142.

<sup>84</sup> There also exist several privately owned and founded savings banks which are treated differently from publicly owned savings banks.

and is primarily based on business activities, the banking sector has been officially extended through two, more recently enacted banking regulations, namely the DIDMCA (Depository Institutions Deregulation and Monetary Control Act of 1980) and the Garn-St. Germain Depository Institutions Act of 1982. These acts basically allowed thrift institutions to get involved in the two basic functions that constitute a commercial bank by allowing them to offer NOW accounts (Negotiable Order of Withdrawal), a form of sight deposits, safekeeping of securities, wire transfers, cash transaction, borrowing at the discount-window, and short-term corporate finance instruments.<sup>85</sup> In addition, these institutions were made subject to similar regulations as commercial banks', such as the holding of minimum reserves, or reporting procedures equivalent to commercial banks, that eventually made them part of the banking sector as so-called depository institutions.<sup>86</sup>

However, particularly in light of the S & L crisis, these restrictions have been liberalised by the Federal Home Loan Board (equivalent of BoG of the FRS and OCC for thrift

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<sup>85</sup> DIDMCA of 1980, Title 2; also Evanoff, D.D., 'Financial Industry Deregulation in the 1980s', in: Economic Perspectives, FED of Chicago, Sept./Oct. 1985, pp.3.

<sup>86</sup> n.a., 'The Garn-St. Germain Act', in: Economic Perspectives, FED at Chicago, Apr. 1983, pp.5; also Novestick, M., 'Garn-St. Germain Act of 1982', in: Savings & LoanNews, Nov. 1982, pp.37.

institutions) to rescue failing thrifts and to stabilise the financial system<sup>87</sup>, or have been deregulated by even more recent acts such as the FIRREA (Financial Institutions Reform, Recovery and Enforcement Act) in 1989<sup>88</sup>.

In spite of the other aspects of the above regulations, the quintessential point is that the commercial banking sector in the US - throughout the 1980s - in light of the definition of a bank, consisted of only two groups - commercial banks, and in a wider and partial sense, thrifts. Thus, it is similarly clear to differentiate between banks and nonbanks under the US banking legislation as it is in Germany.

With respect to the relevant market for banking services in the US, the separation banking system developed commercial banks into performing certain banking functions. These are traditionally the corporate loans, sight and time deposits, money transfer, and correspondent banking services. In addition to them, thrift institutions are traditionally involved in the mortgage, real estate, and

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<sup>87</sup> Cargill and Garcia identify both acts as merely an ad hoc response - what they call an myopic approach - to stabilise the financial system in the US. Cargill, T. / Garcia, G., Financial Reform in the 1980s, Stanford, 1985, pp.66.

<sup>88</sup> The FIRREA of 1989 installed the RTS (Resolution Trust Corporation) and endowed it with far-reaching powers to handle emergency acquisitions of failing and failed thrifts.



savings business to private households. The relevant market is consequently determined by the combination of these products and services in line with their substitute and perceived substitute products, as discussed already. Hence, in spite of fundamentally different banking systems in both countries, the market for typical banking products and services can be pinpointed in an almost identical way.

A chief difference, however, between the German universal banking system and the US separation banking system, lies in the market-entry possibilities of banks into all market segments of the financial services market. German banks are legally permitted to fight off nonbank competitors in all areas of financial services, whereas US commercial banks are partly prohibited from so doing. The Bank Holding Company Act of 1956 and its amendments, in tandem with the Glass-Steagall Act<sup>89</sup>, explicitly limit the scope of service activities US banks are allowed to perform to deposit, credit, trust and related services:

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<sup>89</sup> The Glass-Steagall Act is essentially only a subset of the Banking Act of 1933, namely sections 16,20,21,32, that provided for the separation of banking and commerce.

Kroos, H.E. / Samuelson, P.A. 'The Banking Act, June 16th 1933', sect. 16,20,21,32, in: Documentary History of Banking and Currency in the United States, vol. 2, Chelsea, 1969, pp.2725; also Burns, A.F., The ongoing revolution in American Banking, Washington, 1988, pp.56.

'... all such incidental powers as shall be necessary to carry on the business of banking...' <sup>90</sup> the activities of which the branch ... has determined... to be so closely related to banking or managing or controlling banks as to be a proper incident thereto' <sup>91</sup>.

Furthermore section 20 of the Glass-Steagall Act prohibits member banks from affiliating with <nonbank> organisations

'principally engaged' <sup>92</sup> in securities activities defined as 'any corporation, association, business trust, or other similar organisation ...<dealing with>... the floatation, underwriting, public sale, or distribution wholesale or retail or through syndicate participation of stocks, bonds, debentures, notes or other securities...' <sup>93</sup>.

These relatively vague and general specifications of permissible and non-permissible nonbank activities of bank holding companies have been classified under the 1970 amendment to the BHCA, section 4(c)8. The following table illustrates a summary of these activities:

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<sup>90</sup> 12 US-Code §27.

<sup>91</sup> 12 US-Code §1843(c)(8).

<sup>92</sup> Many large commercial banks frequently attempted to side-step this clause. Citibank, for instance, applied to the FED to establish a subsidiary that would underwrite commercial papers, mortgage-backed securities, municipal revenue bonds, and securities backed by consumer receivables, but not be engaged principally in these activities. Andrews, S., 'Does Glass-Steagall matter anymore', in: Institutional Investor, May 1987, p.272.

<sup>93</sup> The Banking Act of 1933, sect.20.



**Table 6: Nonbanking Activities of Section 4(c)(8) of the BHCA**

- making loans for own account of others through dealing in bankers' acceptances, mortgage banking, finance-company operations, credit card operations, and factoring
- acting as an industrial loan company or industrial bank referred to as a Morris plan bank
- servicing loans for others
- conducting fiduciary activities
- acting as investment or financial adviser to real-estate investment trusts and to investment companies under the Investment Company Act of 1940
- leasing personal and real property with full payout
- making equity and debt investments in corporations to promote community welfare
- providing bookkeeping and data processing services
- operating insurance agencies or acting as an insurance broker, principally in connection with the extension of credit
- underwriting credit life, accident, health insurance directly related to credit extension
- underwriting certain federal, state, and municipal securities (types 1 and 2)
- check verification activities<sup>94</sup>

However, the Federal Reserve Board was also empowered to decide individually whether a specific nonbank activity could be permitted or not. The key criterion was the perception whether the performance of that activity

'... by an affiliate of a holding company can reasonably be expected to produce benefits to the public, such as greater convenience, increased competition, or gains in efficiency, that outweigh possible adverse effects, such as undue concentration of resources, decreased or unfair competition<sup>95</sup>, conflicts of interests, or unsound banking

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<sup>94</sup> This list is only a summary of the entire set of nonbanking activities enumerated under section 4(c)(8) of the BHCA.

<sup>95</sup> Many authors stress the FED's fear of anticompetitive effects as one of the paramount objectives in the passage of the amendments to the BHCA of 1956. An

practices ...<sup>96</sup>.

As a consequence of these limitations, only eighteen of the fifty largest BHCs, in terms of total assets, held a significant percentage of their total assets in nonbank activities. The ratio of the top 50 BHCs in 1988 was 10.2 percent<sup>97</sup>.

In analyzing the restricted activities, two highly relevant market segments, in terms of nonbank competition, that are neither directly accessible for commercial banks, nor via affiliates, can be identified. These are investment banking, and the insurance business. Throughout the 1970s and 1980s the strict separation of commercial and investment banking activities was gradually abolished. To date, however, commercial banks are still prohibited from underwriting securities issues. Significant steps forward were the permission to take over or establish discount brokerage houses<sup>98</sup> which opened the security business, and

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example is: Kim, S. / Miller, S., Competitive Structure of the International Banking Industry, Lexington, 1983, p.65.

<sup>96</sup> McAfee, J., 'Citicorp, New York, New York - Order Approving Acquisition of Savings and Loan Associations', in: Federal Reserve Bulletin, vol.68, 1982, pp.656-671, here p.661.

<sup>97</sup> Liang, J.N. / Savage, D.T., 'The Nonbank Activities of Bank Holding Companies', in: Federal Reserve Bulletin, May 1990, pp.280-292, here p.284.

<sup>98</sup> Dunn, H.D., 'What a Discount Broker Can Do for you', in: Banking World, 29 August 1983, p.61.

to create accounts for private customers very similar to investment banking facilities.<sup>99</sup> In addition, commercial banks were also allowed to conduct financial counselling and brokerage services in the commercial paper market.

With regard to the insurance business, commercial banking and the insurance sector were officially separated in 1982.<sup>100</sup> According to Regulation Y, only minor insurance services, such as acting as an agent or broker in communities with underrepresented insurance coverage, or insuring the members of the holding company, are permitted. Lucrative market segments, such as life insurance or the insurance fund business, which directly compete with banking facilities, are to date still blocked. Hence, the diversification potential for commercial bankers in that area is very limited. Only insignificant cooperations between insurers and banks have so far occurred in the US.<sup>101</sup> The competitive position of commercial banks in terms of market entry, as opposed to nonbanks, is also influenced by geographical barriers. Comparable to the branching restrictions of the German savings bank industry, the

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<sup>99</sup> Möschel, W., Das Trennsystem in der US-amerikanischen Bankwirtschaft, Baden-Baden, 1978, pp.54.

<sup>100</sup> Garn-St. Germain Act of 1982, Title 6.

<sup>101</sup> MacDonald, R., 'Bankers and Insurers: Logical Allies', in: The Bankers Magazine, vol.168, iss.1, 1985, p.13.

McFadden Act of 1927<sup>102</sup>, and the Douglas Amendment (1966)<sup>103</sup> to the BHCA of 1956, limited interstate banking possibilities for commercial banks for more than 50 years. Throughout the 1980s, that restriction was gradually abolished, initiated by changes in state banking laws. A more in-depth discussion of the interstate-banking liberalisation will be provided in section 2.3.

#### **2.2.2.3 Impact on the Market-Entry Potential of Nonbanks**

Structure, scope, and intensity of nonbank competition in various segments of the retail banking market are predominantly determined by the banking legislation. In a segment that is only accessible for commercial banks through explicit banking regulations, nonbank competition will automatically be limited to substitute products or nonbanks owning fully chartered banking affiliates. In addition, the market-entry potential of nonbanks is de

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<sup>102</sup> The McFadden Banking Act, Febr. 25th, 1927; also Cargill / Garcia who concluded that 'the McFadden Act played an important role in establishing the structure of banking by explicitly prohibiting interstate branching and reaffirming the concept of dual banking', Cargill, T. / Garcia, G., *ibid*, p.33.

<sup>103</sup> The Douglas Amendment provided that a BHC operating in one state may not acquire a bank in a second state unless that state expressly authorized the acquisition by statute.  
Moulton, J., 'Nonbank Banks: Catalyst for Interstate Banking', in: Business Review, FED of Philadelphia, Nov./Dec. 1985, p.5.

facto also constrained if the banks were able to build up a dominant market share - prior to the abolition of legal protection - in a certain market segment. The cost of market-entry would be extraordinarily high because of that competitive disadvantage, so that the entry probability is very low. On the other hand, specific banking regulations, such as the interstate banking prohibition for US commercial banks, represent a competitive advantage for nonbanks and increase their market-entry potential. In any way, the scope and structure of nonbank competition in both countries is largely influenced by national banking regulations. The market-entry potential of nonbanks, and their resulting business activities throughout the 1980s in the US and Germany, can therefore be attributed - to a large extent - to differences inherent in the banking systems of both countries.

Under the German Banking Act (§1, §32 KWG), the permissible business activities of nonbanks are specified as those not listed under §1 and §32 of the act. Hence, the market-entry potential for nonbanks in Germany is strictly limited to activities not mentioned in the act; or market-entry requires the acquisition or foundation of a fully licensed banking affiliate.

According to the definition of a bank in the US, only the simultaneous engagement in the granting of commercial

loans and the gathering of deposits is exclusively reserved for commercial banks. As a consequence, nonbanks that divest themselves from one of these requirements are legally permitted to enter a wider range of market segments than their German counterparts. In addition, in entering those segments they are not supervised by US banking supervisory authorities, and are also permitted to open branches on a nationwide basis. As a difference to the German market-entry possibilities of nonbanks, the principle of separation banking in the US prohibits the affiliation of fully licensed banks for the nonbank sector of the economy.

These facts lead to the conclusion that the rise of nonbank competitors in the US banking market was mainly triggered by two factors: (1) the relatively unrestricted market-entry, and (2) competitive disadvantages of commercial banks, in terms of geographical expansion possibilities and business line restrictions. In Germany, however, equivalent conditions and legal pre-requisites to those in the US, do not exist. The German banking legislation, in contrast, (1) strictly constrains nonbank competition in a set of 'vital' banking activities, but also (2) allows commercial banks to fight off substitute products, and nonbank competition through the establishment of nonbank subsidiaries, or the extension of existing product ranges into the area of substitute products.

### **2.3            Significant Legal Changes Affecting Banks in the USA and Germany throughout the 1980s**

After having discussed the strategic relevance of IT for a modern commercial bank operating in the retail banking market, and the regulatory framework governing banks and nonbanks in the US and Germany that determines their market-entry potential, it is necessary to introduce another influencing aspect to our model, which is closely related to the regulatory framework.

The 1980s have witnessed significant legal changes - at least in the US (the German universal banking system made product line and geographic restrictions virtually obsolete) - in the banking legislation that affect the retail banking function of commercial banks. These changes are characterised by an ongoing process of deregulation and liberalisation. The timing, nature, and implications of these changes will be presented in the following two sections.

Discussing this issue adds to our main research in that the detailed analyses of the individual market-entries, as laid down in chapters 4 to 7, start with an analysis of the substitution potential of nonbanks' financial services. It is important to find out whether deregulations have triggered the market launch of a particular financial



product offered by nonbank competitors. A changing regulatory environment is certainly (a) an important influencing environmental factor for our hypothesis that requires a brief discussion, in that it might be the ultimate trigger responsible for a particular market-entry event. Bearing in mind that the aim of stage 1 is to build up an event-schema, the dates of the passage of, for example, a new banking law would represent an important stimulus for a nonbank competitor. In light of the quality of the market environment variable (a significant market-entry of nonbank competitors), it could well be that (b) a deregulative step, in a particular year, has created a competitive advantage for a specific type of nonbank competitor. In addition, such a step could have placed commercial banks in the position of not being able or willing to respond to the entry. This would have substantial impact on our research model. In any way, a short analysis of the main legal changes affecting banks in both countries will provide clarifying insights into these considerations.

### **2.3.1            Product-line related Deregulation**

The US banking market with its long-lasting regulations to prevent a second banking crisis, excessive competition, and a high level of market concentration, developed into a



system of strongly protected market segments during the 1960s and 1970s. The main product-line related restrictions were interest rate ceilings and restrictions in the demand-deposit business.

In 1980 the passage of the DIDMCA<sup>104</sup> (Depository Institutions Deregulation and Monetary Control Act) changed that situation. This act eliminated the famous Regulation Q<sup>105</sup> over a six years phasing-out period which lasted until 01.01.1987. The phasing-out of Regulation Q led to stronger competition in the deposit account business due to the permission of commercial banks to pay market rates. But it also increased banks' cost of financing. As a result, net margins started being squeezed, caused by rising deposit rates, to remain competitive and fixed cost on an almost constant level.

In addition to the phasing-out of Regulation Q, the DIDMCA expanded the right of depository institutions to offer - in a limited range - interest-bearing sight deposit accounts<sup>106</sup>. A product-line that had been virtually non-

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<sup>104</sup> For a detailed description of the titles of the DIDMCA, compare Frazer, D.R. / Kolari, J.W., The Future of Small Banks in a Deregulated Environment, Cambridge, Mass., 1985, pp.47-53.

<sup>105</sup> The Regulation Q was introduced in 1933 through the Banking Act as a ceiling on time deposits with an initial interest rate ceiling of 2.5 percent.

<sup>106</sup> DIDMCA of 1980, Title 2.

existent since the enforcement of the Glass-Steagall Act.

The DIDMCA, furthermore, broadened the refinancing base of commercial banks in allowing NOW-accounts (Negotiable Order of Withdrawal) to be offered by all depository institutions. On the other hand, it abolished the quasi-monopoly position of commercial banks to offer transaction accounts by granting thrift institutions, and non-member banks of the FRS similar product-line rights. Finally, the DIDMCA relaxed state usury laws<sup>107</sup> in the area of mortgage, farming, and business loans.<sup>108</sup>

On the deposit side, the product range of commercial banks was even further expanded through the passage of the Garn-St. Germain Act of 1982.<sup>109</sup> Designed primarily as a relief and revitalisation of the US thrift industry, it included some important product line improvements for commercial banks. The act introduced the money market

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<sup>107</sup> Usury ceilings were originally aimed at making credit available to small and inexperienced borrowers. By law a maximum rate of interest was stipulated that credit institutions were allowed to charge. A typical example was a ceiling on credit card charges for rate payment. also Phans, D., / Hinton, J., 'The Distributional Effects of Usury Laws: Some Empirical Evidence', in: Atlantic Economic Journal, Sept. 1981, pp.81.

<sup>108</sup> DIDMCA, Title 5.

<sup>109</sup> Novestick, M., *ibid*, pp.37-42.

deposit account (MMDA), a direct equivalent of the MMMF<sup>110</sup> (Mutual Money Market Funds), with a minimum deposit of \$2500 since 14.12.82, \$1000 since 05.01.85, and without a minimum deposit since 01.01.86.

This regulatory step was crucial for commercial banks to counterbalance the growing market share of financial conglomerates such as Merryll Lynch in the deposit account business. In tandem with the introduction of the MMDA, a larger transaction account, the super-NOW account, was permitted from January 1983 onwards.

Both acts, the DIDMCA and the Garn-St. Germain Act, eliminated considerable supervisory differences between banks and thrifts which, led to increasing similarities in the product range of both groups. However, in terms of minimum reserve requirements and taxation, some differences still remain in existence.

A paramount barrier that still severely limits the product range of commercial banks is the separation of investment and commercial banking institutionalised through

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<sup>110</sup> The MMMF-accounts attracted a constantly rising proportion of savings away from typical bank accounts which were unable to pay money market rates. By the autumn of 1982 MMMFs held \$230 billion of the nations's funds.  
FED of Chicago, 'The Garn-St. Germain Act', Apr. 1983, in: Economic Perspectives, p.5.

the Glass-Steagall Act. The second half of the 1980s is characterised by numerous attempts to circumvent the Glass-Steagall Act. Since the end of 1982 banks are permitted to issue federal, state, and municipal bonds, conduct fund management and retail discount brokerage<sup>111</sup> 'solely upon the order, and for the account of the customer'<sup>112</sup>.

In 1988, commercial banks were again successful in undermining the Glass-Steagall Act. They were granted the permission to issue commercial papers and to deal in municipal revenue bonds.<sup>113</sup>

That gradual liberalisation of the product range restrictions, however, had only minor significance for large commercial banks. The really profitable businesses, such as underwriting and the issue of shares and mortgage-backed securities, or financial counselling still remain out-of-reach due to the Glass-Steagall Act.

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<sup>111</sup> Hayes, S.L., 'Commercial Banking: Inroads in Investment Banking', in: Issues in Bank Regulation, vol.8, Autumn 1984, pp.21-30, here p.23.

<sup>112</sup> 12 US Code §24 (7).

<sup>113</sup> Gondring, H.P., *ibid*, p.166.

Another element of the US banking legislation that impeded the competitive positioning of commercial banks as opposed to nonbanks was the regional market expansion restriction, similar to the regional restrictions in the German Sparkassen (savings banks) industry. The main impediment of that kind was the so-called interstate banking prohibition, that is the restriction for a commercial bank to bank and expand across state lines. In an attempt to stabilise the economy and to avoid adverse concentration effects in the banking industry, the McFadden Act of 1927<sup>114</sup> ruled that national and state member banks of the FED were only permitted to operate branches in their home state.<sup>115</sup> The possibility to expand on a nationwide basis, via multi bank holding companies or one-bank holding companies including a nonbank subsidiary, was also closed through various amendments to the BHCA of 1956<sup>116</sup>. Thus, to date, BHCs can only acquire banks in other states, if that state expressly authorizes these acquisitions by statute.

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<sup>114</sup> The McFadden Banking Act, 25 Febr. 1927.

<sup>115</sup> Not all states allowed free branching within their boundaries. Arkansas, Colorado, Hawaii, Kansas, Montana, and North Dakota in 1988 still did not permit free intrastate branching.  
Oppenheimer, M / Rietmaier, A, 'Bankenreform in den USA', July 1988, in: Recht der internationalen Wirtschaft, p.529.

<sup>116</sup> The Douglas Amendment of 1966 (sect.3,C) and the 1970 amendment to the BHCA.

With regard to nonbank acquisitions, a purchase is only permitted if the business activities of that nonbank are 'closely related to banking or managing or controlling banks'.

At the beginning that was a very disappointing situation for commercial banks in the US. However, the 1980s showed various deregulations on both a federal and state level, that opened up opportunities to circumvent these constraints. On a federal level, the passing of the DIDMCA, Garn-St. Germain Act , and FIRREA of 1989<sup>117</sup> led to constantly growing powers of BHCs to take over failed or failing thrift institutions on a nationwide basis.

In utilising the more liberal interpretation of banking laws regarding geographic expansion - mainly a more relaxed perception of what business activities are closely related to banking - commercial banks gradually expanded on a nationwide basis<sup>118</sup> through the application of 'loophole-

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<sup>117</sup> The FIRREA of 1989 installed the RTS (resolution trust corporation), an institution responsible for the quick handling of emergency acquisitions of failed thrifts.

<sup>118</sup> Counting only the 'main vehicles', the affiliation of nonbank banks, grandfathered subsidiaries, LPOs, Edge Act Corp., acquisitions of failing thrifts, and correspondent banking services, US banking organisations controlled more than 7000 interstate locations even before most of the states had passed the first interstate banking regulations. Syron, R.F., 'The New England Experiment in Interstate Banking', in: New England Economic Review, Mar/Apr. 1984, p.6.

vehicles' such as nonbank affiliates<sup>119</sup>, Loan Production Offices (LPO)<sup>120</sup>, or Edge Act Corporations<sup>121</sup>.

On the state level, individual states, because of different experiences with regard to branching, retail banking, bank holding company control, and the history of US banking as a unit-banking country, reacted differently

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<sup>119</sup> A commercial bank could purchase another bank, then separate its deposit-taking and lending business (the bank criterion) into two legally distinct institutions, both of which represented nonbank banks. Thus, in the end the acquiror legally ran two nonbank bank affiliates but economically just one bank. Until 1982 when the Board of Governors of the FRS changed its policy about the nonbank bank criterion this device was heavily used. As Savage and Liang in 1990 found in an analysis covering the nonbank activities of BHCs, in 1988 the top 25 banking organisations held on average \$5.94 billion of net nonbank assets which represented 12.4 percent of total BHC assets. Liang, N.J. / Savage, D.T., 'The Nonbank Activities of Bank Holding Companies', in: Federal Reserve Bulletin, May 1990, pp.280-292.

<sup>120</sup> Loan Production offices are commonplace representatives, which means banking staff engaged in soliciting and originating loans and other customer relationships in an office that is not regarded as a brick-and-mortar branch according to the McFadden Act. It was a means of showing market presence and to follow a customer across state lines. In 1988, more than 400 LPOs were operating across the US. Horvitz, P.M., 'Alternative Avenues to Interstate Banking', in: Dynamics of Banking, ed. by Havrilesky, T.M., Arlington Heights, Illinois, 1986, pp.238-248; also Gondring, H.P., *ibid*, p.113.

<sup>121</sup> Edge Act Corporations are organisational devices primarily employed by large commercial banks in money centres, which provide deposit as well as Lending Services outside a bank's home state related to international trade. Cooper, K. / Frazer, D.R., *ibid*, p. 204; also 'The Edge Act of 1919', in: Kroos, H.E. / Samuelson, P.A., *ibid*, pp.2514; also Kim, S / Miller, S, *ibid*, pp.22-23.



to increasing pressures triggered by developments in technology, the economy, and various lobbying groups to liberalize their branching laws. In 1975, Maine passed a law that allowed out-of-state BHCs to invest capital. This so-called 'Maine-experiment'<sup>122</sup> marked the beginning of a series of regulations, such as the FCDA (Financial Centre Development Act) of 1981 in Delaware<sup>123</sup>, to ensure a steady capital inflow into the state to master economic problems.<sup>124</sup>

From 1982 onwards, when Massachussets passed the first regional reciprocal interstate banking law, which allowed the mutual acquisition of commercial banks among New England states<sup>125</sup>, the states started to undermine, and hence

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<sup>122</sup> Saulbury, V.L, 'Interstate Banking - An Update', in: FDIC, Regulatory Review, July 1986, pp.1-17, here p.1.

<sup>123</sup> Erdevig, E., 'New Directions for Economic Development - the Banking Industry', FED of Chicago, in: Economic Perspectives, Sept./Oct. 1988, p.24.

<sup>124</sup> Citicorp, for instance, moved its entire credit card operations to Sioux Falls (South Dakota) because of a similar state law.  
also Savage, D.T, 'Interstate Banking Developments', in: Federal Reserve Bulletin, Febr. 1987, p.80.  
For a general description of the reasons to pass interstate banking laws compare  
Rose, P.S, 'The Interstate Banking Revolution', Westport Conn., 1989, pp.64-67.

<sup>125</sup> If laws were enacted on a reciprocal basis but were specifically crafted to include only contiguous states or states located in the same region, they are called regional laws. This type of interstate banking law resulted in the formation of regional compacts. The New England regional compact encompassed Connecticut (joined in 1987), Maine (1975), Mass. (1982), New Hampshire (1987), Rhode Island (1984) and Vermont



deregulate, the federal McFadden Act. The resulting process of regionalisation shaped the US retail banking market throughout the 1980s. Towards the end of the previous decade more states had passed liberal nationwide reciprocity laws or open-entry provisions.<sup>126</sup> In 1990, a total of 27 states provided at least nationwide reciprocity (several states enforced the interstate banking regulations via a trigger date that was set on 1990). The following table indicates the current status of legislation in each state and lists the states affected by the legislation.

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(1987). Shortly thereafter, in 1985 another major compact was established in the southern region involving 10 states.

Clair, R.T. / Tucker, P.K., *ibid*, pp.12-13;  
also Benett, V.M., 'Interstate, Southern Style', in:  
US Banker, Oct. 1987, pp.79-85.

<sup>126</sup> For a categorisation of different interstate banking laws see Calem, P., 'Interstate Bank Mergers and Competition in Banking', FED of Philadelphia, in: Business Review, Jan./Febr. 1987, pp.4;  
also Eisenbeis, R.A., 'An Analysis of Regional Approaches to Interstate Banking', in: Commercial Banking and Interstate Expansion, ed. by Frieder, L., Ann Arbor, 1985, pp.51-52.

**Table 7: Current Interstate Banking Legislation in the US**

State	Nature of Law	States affected
Alaska, Arizona Idaho, Maine Oklahoma, Oregon Texas, Utah Wyoming	<u>Open entry</u>  9 States	
California, Colorado, Delaware, Illinois, Kentucky, Louisiana, Michigan, Nebraska, Nevada New Mexico, New York, New Jersey Pennsylvania, Rhode Island, South Dakota, Vermont, Washington, West Virginia	<u>Nationwide Entry</u>  - Reciprocity - required  18 States	
Alabama  Arkansas  Connecticut  Florida	<u>Regional Reciprocity</u>  18 States	OR, FL, GA, KY, LO, MD, MS, NC, SC, TE, VA, WVA, D.C.  AL, FL, GA, KA, CO, MD, MS, MO, NB, NC, SC  ME, MA, NH, RI, VT, OK, TE, TX, VA, WVA D.C.  AL, AR, GA, LO, MD, MS, NC, SC, TE, VA, WVA, D.C.

State	Nature of Law	States affected
Georgia		AL, FL, KY, LO, MD, MS, NC, SC, TE, VA, D.C.
Indiana		IL, IO, KY, MI, MS, OH, PA, TE, VA, WVA WI
Maryland		AL, AR, DE, FL, GA, KY, LO, MS, NC, PA, SC, TE, VA, WVA, DC
Massachusetts		CO, ME, NH, RI, VT
Minnesota		CO, ID, IL, IO, KA, MO, MT, ND, SD, WA, WI, WY
Mississippi		AL, AR, FL, GA, KY, LO, MO, NC, SC, TE, TX, VA, WVA
Missouri		AR, IL, IO, KA, KY, NB, OK, TE
New Hampshire		CO, ME, MA, RI, VT
North Carolina		AL, AR, FL, GA, KY, LO, MD, MS, SC, TE, VA, WVA, D.C.
South Carolina		AL, AR, FL, GA, KY, LO, MD, MS, NC, TE, VA, WVA, D.C.
Tennessee		AL, AR, IN, KY, LO, MS, MO, NC, SC, VA WVA

State	Nature of Law	States affected
Virginia		AL, AR, FL, LO, KY, MD, NC, SC, MS, TE, WVA, D.C.
Wisconsin		IL, IN, IO, KY, MI, MN, MS, OH
Washington D.C.		
	<u>International Reciprocity</u>	
Hawaii	1 State	Guam
Iowa, Kansas, Montana, North Dakota	<u>No Interstate Law Enacted</u>	
	4 States	

Source: Board of Governors of the Federal Reserve System  
1990

Thus, the US retail banking market has undertaken a considerable step forward towards a 'nationwide' market during the past decade. Despite the fact that the Congress still has not waived the federal prohibition of interstate banking, and although reciprocal laws - at first sight - appeared to be rather discriminatory to large commercial banks based in money-centre states (which were excluded from most out-of-state entry provisions), the definitions of regions in tandem with more than half of all states - including the most populous and fastest growing - allowing full nationwide market entry, represented a significant

market enlargement. With regard to the expansion possibilities of nonbank competitors, the fact that the bulk of these deregulative steps occurred towards the end of the 1980s, is certainly an important reason for the market positioning that could be achieved by competitors. However, the remaining barriers to geographic expansion for commercial banks in the US - to date - can hardly harm their market positioning strategies.

Apart from the German Sparkassen-sector, geographic expansion or market-entry restrictions for commercial banks in the German banking market are non-existent. Hence deregulative steps of the above kind were not necessary. On the other hand, the creation of the 'Single European Market' in banking after 1992 leads to a comparable enlargement of the retail banking market as in the US.<sup>127</sup> The passage of the Second Banking Coordination Directive in

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<sup>127</sup> Both processes, the US interstate banking and the Single European Market are by their very nature deregulation processes. Among other differences, a chief difference between both processes lies in the direction of the process. The Single Market will be created as a top-down approach, starting from the EC council of ministers, the commission, and the European parliament, that creates directives which have to be transferred into national law. Whereas the US deregulation initiative stems from individual states without a 'federal umbrella'. This approach could be called bottom-up.

1988<sup>128</sup>, which sets minimum capital requirements for banks (ECU 5 mill.), specifies the mutual recognition of home country control resulting in one European banking licence, abolishes the capital endowment clause in the establishment at a branch in a member country other than the home country, and sets minimum standards for Europe-wide banking regulations, represents a great market opportunity for large European commercial banks - among them the 'big three' in Germany - to expand their business via de novo entry or mergers and acquisitions.

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<sup>128</sup> 'The Second Banking Coordination Directive will prove to be a milestone in the evolution of a genuine common market in banking', Llewellyn, D.T., 'Financial Services and Competition', in: Banking World, Febr. 1989, p.28.

## 2.4 Private Households' Changing Purchasing Behaviour of Financial Services

The retail banking market is characterised by a strong dependency on the private sector of the economy. In the US as well as in Germany, private households represent the most important demand aggregate for commercial banks' credit and deposit facilities. Appendix 12 provides the development of households' growth of financial assets and liabilities. The following diagram indicates the development of domestic private households' cash assets in relation to the other sectors of the national economy in Germany throughout the 1980s:

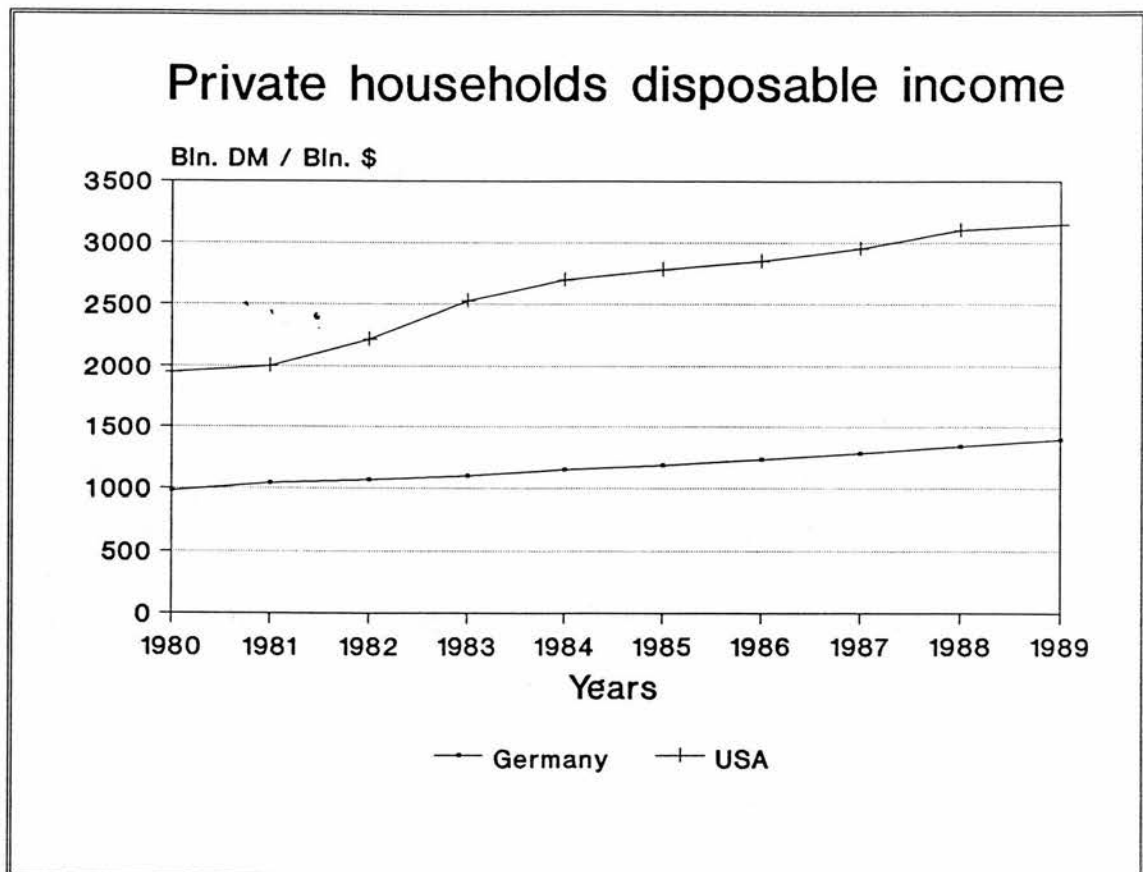
**Table 8: Cash Assets of Domestic Nonfinancial Sectors in Germany in the 1980s**

	1980		1985		1989	
	Bln.DM	%	Bln. DM	%	Bln. DM	%
private h.	1465	63	2092.3	62.3	2712.1	61.1
companies	572.6	24.6	878.3	26.1	1240	28
public h.	285.5	12.4	389.9	11.6	490.2	10.9
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	2323.1	100	3360.5	100	4442.3	100

Source: Deutsche Bundesbank, Monthly reports, Vol.33, Iss.5, 1981, p.41; Vol.38, Iss.5, 1986, p.55; Vol.42, Iss.5, p.54

This increase of private households' savings is a direct consequence of two determinants, the constant growth of private disposable income throughout the 1980s, in

conjunction with relatively high savings ratios. The US economy is thereby characterised by a much stronger growth in personal income, as compared to the German economy (see figure 9 below). On the other side, the savings ratios in both countries were on a slightly declining slope throughout the previous decade, with the German ratio (on average around 13 percent of the disposable income) well above its US equivalent (on average between 5 - 6 percent).<sup>129</sup>



**Figure 9: Private Households Disposable Income**

<sup>129</sup>

Deutsche Bundesbank, Monthly Report, 'Die Sparquote der privaten Haushalte in der Bundesrepublik Deutschland im internationalen Vergleich', vol.42, iss.1, 1990.



Apart from this general tendency towards increasing cash assets and hence wealth among private households in both countries, a shift in the demand pattern of financial services was observable. Triggered by greater market transparency and higher product and service awareness, private individuals developed more price and yield sensitive attitudes regarding their financial services investment and deposit decisions.<sup>130</sup> This trend was first identifiable in the US in the mid-1970s, in the form of rapidly shrinking savings deposits among thrift institutions and commercial banks in favour of the newly introduced money market mutual funds which paid money market rates. In Germany, increasing investment preferences for government bonds (ie Bundesschatzbriefe), investment certificates, and to a lesser degree shares, besides the traditional long-term investment vehicle, the life insurance policy throughout the 1980s were an indicator for this tendency. In contrast to the more conservative investment approach of German private households, US private households traditionally prioritise shares as one of their major investment instruments.

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<sup>130</sup> see Büschgen, H.E., 'Analyse und Prognose der Geldvermögensbildung als Grundlage des Passivgeschäfts der Kreditinstitute - Perspektiven und Strategieansätze', in: Markt und Bank, vol.16, iss.46, 1985, pp.1-33; also Steinbrink, K. / Herrmanns, W., 'Das Anlegerverhalten und seine Auswirkungen auf die Geschäftspolitik der Sparkassen', in: Zeitschrift für das gesamte Kreditwesen, vol.36, 1986, pp.286-290.

With regard to the banks' asset side, private households' tendency to invest money primarily under yield and not liquidity considerations, in conjunction with the tendency to take up credit disposition facilities based on personal creditworthiness, increasingly created a short-term consumer debt mentality.<sup>131</sup> As a consequence of this tendency, private households' share of liabilities of the domestic, nonfinancial sectors in Germany increased substantially from 3.9 percent in 1975, to 5.9 percent in 1980, 5.8 percent in 1985, and 6.1 percent in 1989 (see table 9 below).

**Table 9: Liabilities of Domestic Nonfinancial Sectors in Germany in the 1980s**

	1980		1985		1989	
	Bln. DM	%	Bln. DM	%	Bln. DM	%
private h.	136.7	5.9	187.4	5.8	247.2	6.1
companies	1694.9	73.2	2263.5	70.0	2806.0	69.7
public h.	482.6	20.9	781.4	24.2	975.0	24.2
	-----		-----		-----	
	2314.2	100	3232.4	100	4028.2	100

**Source:** Deutsche Bundesbank, Monthly reports, Vol.33, Iss.5, 1981, p.41; Vol.38, Iss.5, 1986, p.55; Vol.42, Iss.5, 1990, p.54

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<sup>131</sup> Thompson, T.W. / Edwards, R.D., The Changing World of Banking, Richmond, 1982, pp.10.

These figures are well below the US equivalent<sup>132</sup>, which is primarily caused by divergent attitudes about short-term debt<sup>133</sup> as indicated by the usage frequency of for instance credit cards or short-term consumer loans.<sup>134</sup> In particular, this habit opens up market potential for US nonbank competitors to compete with commercial banks in the short-term consumer finance business. Similar developments are observable in the German market, but to a less intense degree.

To sum up, on the liability side of a bank balance private households' investment preferences have shifted towards a straightforward interest rate and yield sensitivity, leading to competitive potential for nonbanks able to provide products and services with attractive returns. Whereas on the asset side, the general trend

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<sup>132</sup> Avery, A.B. / Elliehausen, G.E. / Canner, G.B., 'Survey of Consumer Finances, 1983: A Second Report, in: Federal Reserve Bulletin, vol.70, 1984, pp.857-868; also Elliehausen, G.E. / Wolken, J.D., 'Banking Markets and the Use of Financial Services by Households', in: Federal Reserve Bulletin, Mar. 1992, pp.169-181; also Kennickel, A., / Shack-Marquez, J., 'Changes in Family Finances', in: Federal Reserve Bulletin, Jan. 1992, pp.1-18; also Elliehausen, G.E. / Wolken, J.D., 'Banking Markets and the Use of Financial Services by Small and Medium-Sized Businesses', in: Federal Reserve Bulletin, Oct. 1990, pp.801-816.

<sup>133</sup> Another influencing factor is certainly the different personal income tax systems. In the US, interest payments of individuals on for instance short-term loans are tax deductible as opposed to the German tax system.

<sup>134</sup> see Gondring, H.P., *ibid*, pp.234-236.

towards a higher degree of indebtedness among private households in both countries creates competitive potential for nonbanks primarily in the area of short-term consumer finance. These tendencies are observable in both countries, but divergent mentalities, investment traditions, and regulatory systems, such as the income tax system, determine the specific kind of financial instrument that is chosen by a national private household.

### **3. Overview over Selected Nonbank Competitors in the US and German Banking Market**

This chapter briefly introduces the types of nonbanks chosen to be analyzed in-depth throughout part 2 of this dissertation. It sets the stage for part 2 by providing valuable information on the market-entry variable of our correlation under investigation.

As mentioned already in section 1.2, part 2 consists of a structured analysis of competitive changes in the retail banking markets in Germany and the US triggered by four different types of nonbanks, insurance companies, thrift institutions, retail organisations, and credit card organisations. This analysis, however, focuses among other things on selected financial services offered by these nonbank competitors, in order to examine their competitive relevance as a real threat of substitution to commercial banks' equivalent services. It does not provide information on the type of nonbank itself which entered the market. Hence, for the sake of completion, and to hand over from the relatively broad analysis of the influencing factors affecting our hypothesis, to the detailed analysis of part 2 that is concentrated on establishing the correlation itself, this chapter is required as a necessary link.

Furthermore, before discussing in detail various market-

entries and the banks' strategic replies, it is necessary to state the selection criteria for our sample of nonbank competitors.

### **3.1 Selection criteria**

The US banking market is characterized by a high degree of fragmentation and specialisation. Hence, many nonbank competitors exist that compete only in a tiny little market segment with commercial banks, without substantial market power to establish a competitive threat. As a result, nonbank competitors had to be selected that were large enough, influential, and aggressive to fulfil this requirement. In addition, their respective services had to be comparable to the services of their counterparts in Germany.

Furthermore, due to the fact that two different banking systems and retail banking markets are investigated to test the hypothesis, the set of selected nonbank competitors had to be in existence and of relevance in both countries. The next four sections briefly introduce these nonbank competitors and mention their motivation and thrust to enter the retail banking market.

### **3.2 Thrift Institutions**

Traditionally, US thrift institutions are - like commercial banks - depository institutions, but legally they still do not belong to the group of banks. According to a Supreme Court decision in 1974, thrifts must offer (1) enough bank services to be perceived as an alternative source of funds by customers, and (2) must significantly participate in any bank service line chosen to be considered part of commercial banking. Many thrifts still do not fulfil these legal requirements. Thus, they are not affected by bank regulations nor controlled by banking supervisory bodies. In the literature they are classified as so-called near-banks. The group of thrift institutions in the US encompasses Savings and Loan Associations (S & L), Mutual Savings Banks (MSB), and Credit Unions (CU).

#### **3.2.1 Savings and Loan Associations**

S & Ls are organised and controlled in a similar way to banks. The idea of S & L institutions is quite old. These institutions have been founded for the purpose of providing credit to poorer layers of the population. Mainly to enable them to build or purchase their own home but with relatively low, hence affordable, interest rate levels. So these institutions were historically targeted at the low

income earners segment of the retail banking market, with special emphasis on mortgages and the property finance business.

However, due to the depression in the late 1920s, whereby roughly 40 percent of all S & Ls went bust<sup>135</sup>, Congress subsequently passed the Federal Home Loan Bank Act in 1932 which implemented the Federal Home Loan System (FHLS). This system operates similar to the FRS, namely as a lender-of-last-resort and supervisory body.

As far as the licensing procedure is concerned, the concept of dual banking is applied. In total, less than 4000 S & Ls are currently operating in the marketplace, of which 42 percent are federally chartered and 58 percent possess a state charter.<sup>136</sup> Furthermore, all federally chartered S & Ls must be members of the Federal Savings and Loan Insurance Corporation (FSLIC). This membership implies insurance coverage up to \$ 100,000 for individual deposits. Membership for state chartered S & Ls is optional.

As already mentioned, S & Ls were traditionally engaged in residential loan activities. This subsequently led to an

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<sup>135</sup> Smith, G., Money and Banking, Financial Markets and Institutions, Menlo Par, 1982, p.317.

<sup>136</sup> Gondring, H.P., Finanzmärkte im Wandel, Struktur- und Marktveränderungen im Finanzsystem der USA, Frankfurt, 1989, p.75.



inflexible asset portfolio ranged against flexible term deposits. In 1985, for instance, 61 percent of S & L loans were devoted to mortgages, many of which carried fixed interest rates or contract loan rates that could be changed only on a limited basis.<sup>137</sup> Since the passage of the DIDMCA in 1980 (see 1.3.4.1) they have been permitted to invest up to 10 percent of their assets in consumer loans within the same range of regulations as commercial banks. In addition, they have become increasingly engaged in the credit card business, corporate loans, and NOW-accounts. On the deposit side, new thrift deposits were authorised to carry interest rates adjustable with money market conditions, allowing S & Ls to compete more effectively with money market mutual funds (MMMF). In other words, the expansion of the original mortgage business into consumer finance made them to an important competitor in the retail banking market segment.

Similarly to S & Ls, German Bausparkassen (the German counterpart to Building Societies), were traditionally engaged in the long-term mortgage lending, and house and property finance market. They are also separately regulated and supervised (§1, §3 of Bausparkassengesetz; Building Societies Act). Unlike US S & Ls, however, they operate in a legally protected market niche, and are not allowed to get involved in other banking businesses. Hence, their

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<sup>137</sup> Rose, P.S., The Changing Structure of American Banking, New York, 1987, p.307.

product range is narrower in comparison to S & Ls. Due to the fact that both types of institutions are players in mostly the same market segment, and the inroads undertaken by both types of organisation into the retail banking market, despite some national differences, they will be analyzed in more detail in chapter 5 of this investigation.

Apart from S & Ls, the US thrift industry encompasses two other types of institutions, CUs and MSBs, which also show some competition to US commercial banks, but cannot be compared to Bausparkassen because of different business roots. For the sake of completion they are briefly mentioned on the following pages.

### **3.2.2 Mutual Savings Banks**

Mutual Savings Banks (MSB) are similar to S & Ls in terms of organisation, although both kinds of thrifts differ with regard to their mission. MSBs were historically founded to provide save deposits to the working class.<sup>138</sup> A typical feature of MSBs is their geographic location. Almost all of them are clustered in the New England states. Originating from the objective to attract workers' savings, they gradually developed into the mortgage business

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<sup>138</sup> Kaufman, G., The US Financial System, Englewood Cliffs, New Jersey, 1980, p.154.

competing directly with commercial banks and S & Ls. In the past few years, these MSBs became extraordinarily aggressive in this market segment. Partly as a consequence, they invented the NOW account, and moved from the traditional short-term mortgages with large downpayments, to the longer term conventional mortgage. In addition, they received the same powers as S & Ls regarding consumer finance loans, and were permitted to convert easily from mutuals into federal savings banks. Thus, it was obvious that competition intensified.

MSBs are entirely state chartered and roughly 70 percent are members of the FDIC, whereas 18 percent belong to the FSLIC.<sup>139</sup>

### **3.2.3 Credit Unions**

CUs are, measured by volume of deposits and transactions in consumer finance loans, the largest group of depository institutions belonging to the category of thrifts. They provide credit only to members - predominantly middle-class income earners and professionals such as lawyers - who have to have a common bond of occupation or association, or to groups within a specially defined district, neighbourhood, or community. However, this common bond requirement has

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<sup>139</sup> Johnson, J. / Roberts, W., Money and Banking: A Market-Oriented Approach, New York, New York, 1982, p.293.

been liberalised in recent years, giving the industry an expanded membership base. To date almost 50 million US citizens hold membership in CUs all of which require primarily credit for consumer durables.<sup>140</sup> Hence, these institutions are also a competitor to commercial banks in the consumer loan market segment.

In terms of licensing and supervision, two-thirds of roughly 18,000 CUs hold a federal charter, whereas the remainder is state chartered. In addition, membership of the so-called National Credit Union Share Insurance Fund (NCUSIF) is mandatory.

### **3.3 Credit Card Organisations**

The provision of consumer credit and short-term financing facilities in the form of credit cards is generally performed via universal credit cards according to the 'three-party-system'<sup>141</sup>, as opposed to the issuance of specialized customer cards applied by retail organisations which will be discussed in the following section.

The three-party-system encompasses the credit card issuer, contractual intermediaries primarily retailers, and

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<sup>140</sup> Gondring, H.P., *ibid*, p.79.

<sup>141</sup> Keller, A., Kreditkarten, Diesenhofen, 1981, p.21.

the customers. Credit card bearers (the customer) are liberalised from the obligation to pay cash by producing a credit card which has been issued after a test of their creditworthiness. The contractual intermediaries' outstanding receivables are paid by the issuing company, which, in turn, charges the credit card bearer on a monthly basis. In order to achieve a profitable system, two requirements must be fulfilled: (a) a large number of bearers, and (b) a dense network of contractual intermediaries. As a consequence, only five credit card organisations in the US were able to establish a functionable network. These are American Express, Diners Club, Carte Blanche, Master Card and Visa. These networks are implemented in the German as well as in the US banking market (see Appendix 2).

With regard to the marketing concept of credit card issuers, two basic strategies are pursued. Firstly, the mass-marketing of credit cards to gain maximum distribution among ordinary customers, and secondly, a more targeted approach towards HNWI (High Net Worth Individuals) through the issue of exclusive (ie. gold-cards) credit cards, endowed with additional services such as travel and insurance services in line with much higher credit limits.

### 3.4 Retail Organisations

Finance companies and retailers made inroads into the retail banking market by applying the concept of 'financial symbiosis'.<sup>142</sup> They started diversifying into financial product lines to mutually benefit from experience gained in sales and retailing. The rise of captive finance companies is a good example to describe that. Firms such as Ford, GE, Westinghouse, or IBM set up their own finance subsidiary to promote the sales of their parent company's manufactured products. A typical feature of these subsidiaries is the fact that they are not supervised by a specific regulatory body. Based on their business activities, two broad categories of finance companies can be differentiated, consumer finance and commercial finance companies. Consumer finance companies are predominantly concentrated on instalment credit, to purchase consumer durables, or unsecured short-term credit to private households. Whereas commercial finance companies focus on short and medium-term financing of businesses, as well as factoring and leasing businesses.<sup>143</sup>

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<sup>142</sup> Rose, P.S., The Changing Structure of American Banking, New York, 1987, pp.330-350.

<sup>143</sup> Aquilar, L., 'Banks and Nonbanks at the End of the 80s', FED of Chicago, in: Economic Perspectives, Jan./Febr. 1990, p.13; also Lockett, C., 'Recent Developments in the Mortgage and Consumer Credit Market', in: Federal Reserve Bulletin, vol.68, 1982, pp.285.

Due to the focus of this dissertation on retail banking primarily to private households only retailers, in both countries, will be analyzed in the main part (chapter 6).

Retailers compete with commercial banks primarily in consumer-orientated product lines. The original objective was to provide credit to consumers in order to sustain their retail sales. However, by now very large retail stores in the US as well as in Germany provide in-store financial centres which offer credit facilities, insurance, or securities investment on top of clothes, furniture, or food.

There exist two main explanations for the inroads they undertook into the financial services industry which qualified them as nonbank competitors to commercial banks. Forced by a changing market environment in retailing, primarily in the US, for instance through the emergence of new discount and speciality stores during the past decade, incumbent retailing chains experienced stiffer competition in conjunction with a poor outlook in terms of growth for their own industry. On the other side stood the banks' record of almost consistent asset growth and impressive profitability figures even during periods of general economic downswings. So it appeared more than clear that retailers tried to capitalise on the expertise they had gained in retailing, because the retailing of financial



services, like the retailing of merchandise, is a customer-driven industry.

One of the most crucial assets they could build on was their nationwide distribution network including the large customer base. Hence through the issue of specialised credit cards to open customer accounts as a means of sales promotion, these companies could easily obtain a significant share of the consumer finance market. In 1985 already, the number of issued specialised cards in the US was four-times the number of issued universal credit cards.<sup>144</sup> Hardly any changes in the marketing strategy or additional cost were necessary to gain these synergy effects.<sup>145</sup>

In order to emphasize the 'consumer-dedication', and the variety of services offered, the structure of Sears Roebuck, the largest US retailer, is briefly described as an example:<sup>146</sup>

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<sup>144</sup> Judt, E., 'Der US-Kreditkartenmarkt im Überblick', in: Bank und Marketing, 1985, Iss.8, p.14.

<sup>145</sup> For a more detailed analysis of the retailing industry and its similarities to the financial services industry the following source is recommended.  
Friars, E., Money Merchandising: Retail Revolution in Consumer Financial Services, Management Analysis Centre, Chicago, 1985

<sup>146</sup> Sears Roebuck, Annual Report, various issues throughout the 1980s.



- Merchandise Group, including more than 900 department stores and shops all over the US and adjacent countries
- Sears World Trade Inc., the import-export branch of the concern
- Discover Card, the firm's own credit card operation
- Sears Savings Bank with about 100 branches nationwide
- Allstate Insurance Group
- Dean Witter Reynolds Financial Services Group, the company owned investment banking arm
- Coldwell Banker, its nonbank bank subsidiary and real estate broker

### 3.5 Insurance Companies

The US insurance industry includes social security institutions, life insurance institutions, property & liability companies (these are 'fire', marine, accident, and health insurance), and pension funds.<sup>147</sup> In light of the relatively low level of social security in the US in contrast to the German system, life insurance and private pension plans reach a high importance in the US.<sup>148</sup> For the

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<sup>147</sup> Vaughan, E.J., Fundamentals of Risk and Insurance, New York, 1982, pp.52.

<sup>148</sup> In 1988, life insurance companies reached an aggregate balance sheet total of more than \$ 600 billion. Gondring, H.P., *ibid*, p.93.

purpose of the dissertation the following will only focus on life insurance companies and services, leaving aside the other pillars of the insurance industry.

According to the McCarron Act of 1945, only states are permitted to charter and supervise insurance companies in the US.<sup>149</sup> Similar to the state banking legislation, insurance legislation specifies minimum capital requirements, reporting procedures, minimum contents of insurance contracts, permissible insurance formulae and the like. Each state requires a separate insurance licence and also differs in its legislation, which represents a significant barrier for an insurance company attempting to operate on a nationwide basis. The supervisory function is performed by so-called 'insurance commissioners' in each individual state. On a federal level, these commissioners are members of the 'National Association of Insurance Commissioners' (NAIC). This organisation has no legislative power. It is nothing else but an information exchange for its members.<sup>150</sup>

German insurers are also independently supervised and regulated (Versicherungsaufsichtsgesetz (VAG); German Insurance Company Act). These regulations include similar

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<sup>149</sup> Edminster, R.O., Financial Institutions: Markets and Management, New York, 1980, p.167.

<sup>150</sup> compare Vaughan, E.J., *ibid*, p.144.

business restrictions, requirements, and constraints as in the US. In any way, insurers in both countries attempted to widen their deposit base, by attracting away deposits originally stemming from the commercial banking sector.

## **Part 2:**

**Analysis of the Substitution Potential of  
Selected Financial Services Offered by Nonbanks  
Entering the Retail Banking Market, and  
Commercial Banks' Strategic Reactions, in  
particular in terms of IT**

### **4. Market-Entry of Life Insurance Companies**

#### **4.1 Qualification of Capital Creating Life Insurance Policies as a Substitute Product to Bank Deposits**

Capital creating life insurance policies, as for instance the 'gemischte Lebensversicherung (mixed life insurance policy)' in Germany, or whole life/new wave policies in the US, guarantee a fixed minimum payment, payable with completion of the insurance period, and also include profit participating rights which are variable depending on the profit generated by the insurance company

over time.<sup>151</sup> The insurance taker possesses a right on both payments regardless of the fact that he might die before completion of the insurance contract.<sup>152</sup> As a consequence of that payment scheme, the regular payments made to the insurance company by each insurance taker during the life of a policy incorporates both a savings part, to finance the final payment to the insurance taker with completion of the insurance contract, and a risk part, to ensure payment in case of preliminary death of the insurance taker. The characteristic feature of these policies is the combination of a typical savings procedure with an insurance service.

With regard to the market share of life insurers<sup>153</sup> in general, and the share of investment of all private households in life insurance policies in particular, one can note that in the interval 1980-88, the capital stock of all domestic life insurers in Germany rose from DM 173.3

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<sup>151</sup> Greene, M.R., Risk and Insurance, 4th edn., Cincinatti, 1977, p.425; also Farny, D., 'Zur Rentabilität langfristiger gemischter Lebensversicherungen', in: Zeitschrift der Versicherungswirtschaft, vol.72, 1983, pp.363-80, here p.364.

<sup>152</sup> A capital creating life insurance policy does include both cases, preliminary death of the insurance taker, and regular duration of the contract.

<sup>153</sup> compare Stammer, K., Nichtbanken als Substitutionskonkurrenten auf dem Bankleistungsmarkt, Frankfurt, 1987, sect. 2.2.

billion to DM 380.3 billion.<sup>154</sup> That equals on average an annual rate of increase of 10.3 %. The main reason for that significant growth lies in the sale of capital creating and other life insurance policies. During the same interval, private households increased their investment in life insurance policies from 18.3 % up to 21.4 %. This trend goes in line with a significant decrease in investment in typical bank deposits. They declined from 42.8 % in 1980, to 28.6 % in 1988.<sup>155</sup> Similarly, although on a more moderate slope, the capital stock of all life insurance companies in the USA in 1986 reached a total of \$ 820 billion.<sup>156</sup> That development - at least in the German retail banking market - represented a considerable movement of refinancing capital in the form of deposits away from the banking sector.

Capital creating life insurance policies qualify for a number of reasons as substitute products for typical savings products of commercial banks:

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<sup>154</sup> Schwebler, R., 'Kapitalanlagen der Lebensversicherer: Tendenzen und Perspektiven', in: Die Bank, 7/1989, pp. 378-382, here p.378.

<sup>155</sup> Schwebler, R., *ibid*, p.379.

<sup>156</sup> n.a., Board of Governors of the Federal Reserve System, 'Selected Financial Institutions', in: Federal Reserve Bulletin, vol.72, 1986, no.6, Tab.1.37.

- (a) similar to the commercial banking industry, insurers are subject to strict supervisory regulations in both countries. These regulations include such detailed issues as permissible average death rates, interest rates, and applicable formulae to ensure fair and sound calculations of the insurance policies.<sup>157</sup> Due to the long maturities of capital creating life insurance policies (on average over 25 years), the attractive payment scheme, and the strict supervision, these policies are regarded as very secure investment instruments by private households as compared to other securities.
- (b) in terms of profitability, capital creating life insurance policies in most cases exceed comparable investments in banking products. In the case of German mixed life insurance policies, recent studies<sup>158</sup> have shown that investment in these policies achieved the second-best yield, just behind the yield of government bonds.

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<sup>157</sup> These regulations on top of general laws governing the solidity of insurance companies, are enforced by the VAG (Versicherungsaufsichtsgesetz = Insurance Act) and controlled by the Federal Supervisory Office for insurance companies in Germany.  
Schmidt, R. / Frey, P., Versicherungsaufsichtsgesetz: Bundesaufsichtsgesetze, Kartellrecht der Versicherungswirtschaft, Munich, 1983, Tz.1.

<sup>158</sup> Farny, D., *ibid*, pp.370; also Rudolph, B., 'Sollten Banken am Versicherungsmarkt tätig sein', in: Die Bank, 12/1987, pp.655-661, here p.657.

The profitability of a life insurance policy is determined by three components:

- the German Insurance Act guarantees a minimum nominal interest rate of 3.5 percent per year.<sup>159</sup>
- the special payment scheme of a capital creating life insurance policy guarantees a profit participating right. Again the Federal Supervisory Office for insurers mandates for a minimum distribution of 90 percent of the profits<sup>160</sup> among the insurance takers.<sup>161</sup>
- a third important factor lies in the tax advantage over comparable banking products. Firstly, under German tax law, an individual's insurance contributions, including the savings part of a capital creating life insurance policy, are tax deductible up to a certain maximum amount. In addition, until 1987 no capital gains tax had to be paid on the final

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<sup>159</sup> Pestenhofer, H., "Reform der Lebensversicherung kommt 1987 - Altkunden werden nicht benachteiligt", in: Handelsblatt, 6th May 1986, p.B1.

<sup>160</sup> These profits are net profits after retained earnings, dividends and other provision have been put aside.

<sup>161</sup> Angerer, A., 'Lebensversicherung - 100 Jahre danach', in: Versicherungswirtschaft, vol.39, 1984, pp.688-693, here p.692.



payment after completion of the contract. Since the Tax Reform Act of 1988, it is only fully tax deductible within certain income ranges.<sup>162</sup> However, comparable expenses made for investment, such as all kinds of savings plans offered by banks, are not tax deductible under German law.

Whereas the German mixed life insurance policy - solely from a profitability perspective - can be regarded as a highly competitive product, the US whole life policy is less competitive. The main reason for that development is the abolition of interest rate ceilings on bank deposits, and the strong growth of money market funds and accounts at the beginning of the 1980s. The yield ranges in many cases between four and five percent.<sup>163</sup> In addition, under US tax law an individual's annual insurance contributions are also tax deductible, but full capital gains tax must be paid on the final payment after completion of the policy.<sup>164</sup> Only recently with the launch of new wave policies (see next section), that situation has begun to improve.

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<sup>162</sup> Rudolph, B., *ibid*, p.657.

<sup>163</sup> Vaughan, E.J., *ibid*, p.344.

<sup>164</sup> Lucas, V.B., 'Saving functions of life insurance', in: Life and Health Insurance Handbook, 3rd edn., Homewood, Illinois, 1973, pp.39-52, here p.44.

(c) Traditionally, the significance of life insurance policies as means of security for individuals is determined by the social security system of a country. Throughout the 1960s and 1970s, the so-called 'three-pillar-system'<sup>165</sup> of social security in Germany worked very well. However, the 1980s witnessed a growing concern in the working population - in light of increasing rates of unemployment, and decreasing performance of the mandatory federal pension insurance to finance the pensions of the retired population - over the level of income after retirement. The gap between the net income level before and after retirement is gradually increasing. That gap can only be closed through private pension plans which predominantly are life insurance policies of various kinds.<sup>166</sup> Consequently, the weakness of the national social security system can be identified as an important motif of private households to allocate more savings to life insurance than to other investment possibilities.<sup>167</sup>

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<sup>165</sup> The three-pillar-system consists of the mandatory federal pension insurance, company-provided pension schemes, and private pension plans.

<sup>166</sup> Pohl, M. / Stracke, G., 'Financial Services in Deutschland (4): Marktstrategien der Versicherer', in: Die Bank, 4/1988, pp.191-211, here p.192.

<sup>167</sup> also compare Laskowski, G., 'Die Lebensversicherung im Gesamtsystem der Alterssicherung', in: Versicherungswirtschaft, vol.39, 1984, pp.759.

The social security system in the US has always been less sophisticated in comparison to the German system. As a result, private pension plans and therefore life insurance policies, due to their long-term nature, have traditionally been among the strongly preferred investment vehicles for long-term savings plans in the US. With the introduction of high-yield financial innovations, primarily through brokers and investment banks, towards the end of the 1970s and early 1980s, however, the traditional high market share of whole life policies started to decline. High inflation and unemployment rates during that time were responsible for a growing disbelief in the functionability of the official social security system, leading to a strategy among many individuals to go for high interest investment alternatives in order to sustain - via private pension schemes - a certain standard of living after their retirement.<sup>168</sup> However, the differences in trends in both countries regarding the significance of life insurance policies, that is the relative incline in Germany, as opposed to the relative decline in the USA, is inherently determined by the social security systems in these countries.

- (d) A fourth component that is important in discussing the question of substitutionability, is based on the

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<sup>168</sup> n.a., 'Upheaval in life insurance', in: Banking World, 25 June 1984, pp.44-52, here p.47.

existing competition in refinancing among insurers and commercial banks. Capital creating life insurance policies are not only a competitive product in the case of an individual seeking the best alternative for his or her first long-term saving plan. They are also a direct competitor in the case of re-investment possibilities of insurance policies ready for the final pay-out after completion of the contract. By offering attractive reinvestment packages, such as the combination of an insurance policy with an investment fund<sup>169</sup>, insurers avoid a significant capital outflow into the banking sector. In the process, the refinancing possibilities of commercial banks are directly affected by that movement. Through the application of what might be called a 'fish-trap-effect'<sup>170</sup>, these insurance companies attempt to ensure themselves a steadily growing refinancing base on the back of the banking sector.

In combining these four components, it can be concluded that capital creating life insurance policies, because of their security, long-term nature, and high returns,

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<sup>169</sup> n.a., 'Assekuranz zieht ein Drittel der Spargelder an sich', in: Sparkassenverband-Zeitung, 30 Jan. 1987, p.34.

<sup>170</sup> Kaven, J.P., 'Banken und Versicherungen zwischen Konkurrenz und Kooperation', in: Kreditwesen, 4/1987, pp.148-151, here p.150.

represent a highly competitive product compared to typical banking deposit facilities in Germany. The US counterpart, in contrast, increasingly lacked market attractiveness because of its relatively low returns, attractive interest rates paid by money market products, and the general deregulation of interest rates on bank deposits in the 1980s.

#### **4.2        Developments in Competition and Insurers' Strategies in the US and German Markets**

##### **4.2.1        Developments in Competition in the US Market**

Traditionally, life insurance policies have always been highly preferred financial instruments for most US private households to invest savings. The reason is that the relatively low level of the US social security system compared to the German system, put great pressure on individuals to look for secure, long-term investments in order to ensure a stable standard of living, and pension payments after retirement. As a consequence, capital creating life insurance policies such as the already mentioned whole life policy, have long been on the market in the US.

Due to high-yielding financial services, such as cash management accounts or money market mutual funds<sup>171</sup>, offered by financial conglomerates (ie Merryll Lynch) and broker houses towards the end of the 1970s, however, life insurance policies started to strongly decline in market share. As a result of rapidly shrinking sales figures, many US insurers showed signs of deteriorating profits and ultimately solidity. In addition, the formerly most important selection criterion for private households to purchase a life insurance policy, the security, was constantly fading because of mistakes made in the supervision of insurance companies<sup>172</sup>, and the fact that most bank and securities investments were insured by the FDIC. Hence, the whole life policy in the US was in a big trough at the beginning of the 1980s; whereas in Germany it was exactly the opposite.

US insurers first attempted to regain parts of lost territory by introducing yearly renewable term insurance policies as so-called modified whole life policies<sup>173</sup>, which

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<sup>171</sup> Aguilar, L., 'Still Toe-To-Toe: Banks and Nonbanks at the end of the '80s', in: Economic Perspectives, FED of Chicago, vol.14, iss.1, Jan/Feb. 1990, pp.12-23, here p.14.

<sup>172</sup> n.a., 'State Watchdogs are Outmanned and Outgunned', in: Banking World, 25 June 1984, p.52.

<sup>173</sup> Beck, J.G., 'Die Lebensversicherung in den USA: Wohin steuert Universal Life', in: Bank und Markt, 5/1990, pp.28-30, here p.29.

essentially exploited loopholes in the US tax system<sup>174</sup> in that provisions which were made due to the issue of these policies could be deducted from corporation taxes. However, in 1984 the US Congress closed this loophole by changing the relevant sections in the US tax legislation.

The above financial innovations, the change in tax legislation, and the changed demand pattern forced insurers to create new product strategies in order to survive in the market. That strategy was the unbundling of the risk insurance part and the savings element of the classical whole life policy. In a second step, these elements were rebundled. The savings part was placed with investment banking facilities, generally in the form of investment accounts, and was combined with 'ordinary' life insurance policies. That method guaranteed high returns and simultaneously high liquidity for the investor, because the accumulated funds can be withdrawn on demand. Typical products that incorporate this method are universal life and variable life insurance policies.<sup>175</sup> These products are commonly known as 'New Wave Policies'.<sup>176</sup> Because of the fact that the saver's money is directly transferred out of the

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<sup>174</sup> This loophole was created through a specific interpretation of section 818c and 820 of the US tax legislation.

<sup>175</sup> n.a., 'An Array of New Products to Woo the Policyholder', in: Banking World, 27 Dec. 1982, p.106.

<sup>176</sup> n.a., 'Upheaval in Life Insurance', *ibid*, p.47.



insurance sector into the investment banking industry, US supervisory authorities mandated double licensing procedures for a new wave policy. That means the supervisory authorities of both financial sectors must grant permission before a new product can be distributed on the market.<sup>177</sup>

In order to quickly market these products a wave of takeovers, alliances, mergers, and establishments of subsidiaries between insurers and investment banking organisations took place towards the second half of the 1980s. As a result, the array of new services combining risk insurance and securities investment grew constantly during the remainder of the previous decade. To date, the product variety and qualitative modifications is still much larger in the US in comparison to Germany.

The more intensifying competition between the insurance and commercial banking industry in the US - since the mid-1980s - is hence based on three essential developments. Firstly, the market attractiveness of capital creating life insurance policies in terms of returns and liquidity, grew significantly through the introduction of new wave policies. Secondly, the close link-ups between insurers and investment banking organisations and the resulting variety

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<sup>177</sup>     ibid, p.48.



of product combinations involving a risk insurance and capital investment element, created a 'service' with greatly enhanced substitution capabilities to typical bank deposits. Thirdly, due to the transfer of insurance savings into the investment banking sector, life insurers' demand for commercial banking services to redeposit funds started to decrease, and hence also the potential of banks to at least participate indirectly in the wealth accumulation of private households outside the banking sector. With regard to competition in the consumer finance business, insurance companies do not pose a serious threat to commercial banks.<sup>178</sup>

#### **4.2.2 The Competitive Situation in Germany**

Before discussing competitive moves and developments in detail, it is necessary to briefly identify two factors that constitute a significant difference to the competitive situation in the US market. In Germany, the non-separation of investment and commercial banking functions has led to (a) a close business relationship between insurers and commercial banks in terms of the participation in refinancing funds created through existing insurance contracts, which, in turn, has gradually resulted in (b) a

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<sup>178</sup> see Aguilar, L., 'Still...', *ibid*, pp.12-23, here p.21; also Pavel, C. / Rosenblum, H., 'Banks and Nonbanks: The Horse Race Continues', in: Economic Perspectives, vol.9, no.3, May/June 1985, pp.3-17, here pp.13-14.

system of cross-shareholdings between both industries to ensure that cooperation.<sup>179</sup>

The combination of both factors might lead to the conclusion that these shareholdings represent a strong implication on the development of competition. Studies undertaken to investigate the significance of these cross-shareholdings, cooperations and their implications on competition, have found that only minor holdings exist between large and medium-sized life insurance companies and banks, which cannot justify the assumption that competition has long been eliminated by these strategic movements.<sup>180</sup> But it is nonetheless worth recalling, at least in contrast to the situation in the US where cross-shareholdings hardly exist due to the Glass-Steagall regulation, that about one-third of all major insurers in Germany hold stakes in commercial banks<sup>181</sup> and that long-lasting relationships such as the cooperation between the 'R + V' insurance company and cooperative banks<sup>182</sup> certainly do affect competitive

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<sup>179</sup> compare Vollmer, L., 'Kooperation und Konzentration von Banken und Versicherungen', in: Die Bank, 7/1989, pp.352-358, here p.353.

<sup>180</sup> Bayrische Hypotheken- und Wechselbank AG, Wegweiser durch deutsche Unternehmen 1985, 28th edn., Munich, 1986, pp.654.

<sup>181</sup> compare the analysis done by Stracke, G. / Pohl, M., 'Financial Services in Deutschland (4): Marktstrategien der Versicherer', *ibid*, pp.200-211.

<sup>182</sup> Harder, P.C., 'Neben Standardprogrammen auch individuelle Versicherungsangebote', in: Handelsblatt, 24 May 1989, p.24;

developments. It would be wrong, however, to conclude that competition is severely constrained.

With regard to the first factor mentioned above - the participation of banks in the process of redepositing funds accumulated in insurance companies - major differences caused by the German Insurance Act do exist. Unlike in the US, where the clear-cut separation of the insurance and commercial banking industries has mandated strong competition to attract refinancing funds, because insurers increasingly redirected released insurance funds into investment banking facilities (compare previous section), thereby side-stepping the banking industry, German life insurers in contrast traditionally offer a wide range of refinancing facilities to commercial banks. Typical facilities are loans against SD certificates, debentures, and mortgage bonds.<sup>183</sup> In addition, strict lending controls<sup>184</sup> strongly limit insurers' potential to directly grant credit to companies. The only way to do that is via financial

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This relationship is in existence for more than 30 years. Many bank directors of large cooperatives are also members - at least in the supervisory boards - of the R + V insurance subsidiaries which operate as independent organisations within a holding structure.

<sup>183</sup> For a more in depth description of investment and capital deposit trends within the German life insurance sector compare Schwebler, R., 'Kapitalanlagen...', *ibid*, pp.378-382.

<sup>184</sup> §66 of the VAG.

intermediaries which then bear the risk of default. As a consequence, insurers, as a rule of thumb, grant 40 percent of the accumulated insurance money as refinancing funds to the banking sector, 25 percent of which is then used as credit facilities for companies through the application of banking products.<sup>185</sup> Thus, a not unimportant business relationship - almost in the form of a symbiosis - is grown over time between banks and insurance companies influencing the development of competition in the German market.

Despite these historically grown relationships, the strong wave of capital creating life insurance products and related services thrown on the market towards the end of 1982 created strong competition. Insurers' underlying rationale was two-fold. Firstly, to secure the strong market penetration reached throughout the first half of the 1980s<sup>186</sup>, and secondly to diversify into the deposit business traditionally dominated by the universal banking sector. This strategy culminated in two areas of interest and therefore competition:

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<sup>185</sup> Schwebler, R., 'Chancen und Probleme im Beziehungsgeflecht von Banken und Versicherungen', in: Die Bank, 22th edn., 1986, p.73.

<sup>186</sup> According to the Bundesbank, life insurance companies reached a total of 61.5 percent of the capital stock of all insurance companies in 1984.  
n.a., 'Assekuranz zieht ein Drittel der Spargelder an sich', Sparkassenverbands-Zeitung, 30 Jan. 1987, p.11

- (1) competition in the area of new or first deposits in the form of life insurance policies instead of bank deposits
- (2) competition in the area of potential redepositing funds accumulated within insurance companies through policies ready for pay-out.

Both segments require different product strategies. In the case of segment (1), the promotion of capital creating life insurance policies shifted a significant share of private households' investments away from banks into the insurance industry (see section 4.1). In addition, life insurers started to unbundle typical insurance services (the risk part) and saving services (saving part). They then created a pool of individual services which were rebundled to create new products. A typical example for that strategy is the so-called 'Berlin-loan' (a loan that used the advantageous tax status of Berlin before reunification) which could be combined with a life insurance policy.<sup>187</sup> This development is comparable to examples of universal life or variable life policies of the US market, although it happened somewhat later.

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<sup>187</sup> Stracke, G. / Pohl, M., 'Financial Services in Deutschland (4): Marktstrategien der Versicherer', *ibid*, p.196.

With regard to segment (2), it is important to mention that not only competition, but also a great deal of cooperation does exist between insurance companies and commercial banks in Germany. Quite often, because of lower risk considerations, life insurers use banking facilities to redeposit their accumulated funds. In contrast to deposits made by private households, however, insurers because of the scale of their investments, their well-informed staff, and variety of investment alternatives, enjoy a much stronger bargaining power. Consequently, banks are forced to pay more attractive interest rates in order to keep these refinancing facilities.

This reaction has two important impacts on banks. Firstly, profit margins in the retail banking function of a bank are squeezed, and secondly, the business structure of the portfolio of investors becomes more dependent on a few large-scale investors such as insurance companies. Thus, the deposit activities of insurers - despite the involvement of banking products and services - accelerates the process of disintermediation of the banking sector. Less private households - as a tendency - place their savings with banking facilities.

Whereas in the USA the high intensity of competition is caused by investment funds offered by predominantly investment banks to attract away a large proportion of

insurance funds ready for redepositing, this type of product gained momentum only very recently in the German market. German life insurers, instead, issued investment certificates to keep these funds within the insurance sector, and thereby even prolonging - from a commercial bank's perspective - the duration of bound capital lost to insurers through life insurance policies.

Insurance companies did that - at least the large ones such as the Allianz group, Gerling, or Achener-Münchener Versicherung - through the establishment of capital investment subsidiaries.<sup>188</sup> The Allianz group capital investment subsidiary, for instance, in 1988 managed funds of worth over DM 1 billion, consisting of primarily investment certificates and investment funds.<sup>189</sup> Others, such as the Achener-Münchner insurance group, acquired a large fully-licensed commercial bank (the BfG Bank, which is among the top twenty banks in Germany), and converted into a holding structure in order not to remain just competitors in a few markets, but to be able to offer the full range of

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<sup>188</sup> That step is understandable bearing in mind that according to predictions in the year 2000 roughly DM 200 billion of insurance funds locked in insurance policies will be ready for pay-out. Stracke, G. / Pohl, M., *ibid*, p.197.

<sup>189</sup> Stracke, G. / Pohl, M., 'Financial Services in Deutschland (4): Marktstrategien der Versicherer', *ibid*, p.197.



banking products.<sup>190</sup>

A significant difference in the development of competition between capital creating life insurance policies and banking facilities is attributable to the distribution channel. Whereas banks still sell their products primarily via branches in Germany, that is a more static way, insurance companies market their products via a highly dynamic sales force. With a total of roughly 80.000 full-time salespeople and about 250.000 part-timers<sup>191</sup>, insurance companies reach a much higher density than bank branches. The majority of these salespeople operate as one-company representatives primarily focused on private households. In addition, they are generally aggressive, well-trained, and work on a commission base. Hence it was possible to quickly market a new life insurance policy on a broad scale. In a second strategic movement, insurance companies cooperated with banks in using banking staff to cross-sell banking products and life

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<sup>190</sup> This strategic movement and similar ones are generally summarized under one concept which is called 'All-finance-concept', under which one holding company offers the whole range of financial services reaching from securities, credit cards, insurance, to typical banking products. It represents the German equivalent to the process of financial supermarkets and conglomerates that started in the US at the beginning of the 1980s.

<sup>191</sup> Stracke, G. / Pohl, M., 'Financial Services in Deutschland (4): Marktstrategien der Versicherer', *ibid*, p.193.



insurance policies out of one hand via bank branches. They thereby combined special insurance and banking know-how.<sup>192</sup>

To sum up, in Germany as opposed to the US, life insurers do not only compete vigorously with commercial banks through substitute products like capital creating life insurance policies. They also cooperate with banks in using banking products and services predominantly in case of redepositing their accumulated insurance funds. However, due to the quick market penetration via a dynamic sales force, organisational vehicles such as takeovers of banks, and the creation of holding companies, life insurance companies significantly increased their capital stock. As a consequence, the disintermediation process of the banking industry was accelerated, ultimately leading to growing pressure on the profit margins and a changed business structure of the portfolio of investors within commercial banks.

#### **4.3 Commercial Banks' Reactions in Both Countries**

As we have seen in the previous two sections, competition between insurers and banks in the US intensified primarily through the creation of new and

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<sup>192</sup> compare Kaven, J.P., *ibid*, p.151.

innovative products. Parallel developments in the German market are observable, but only in a less intense way and with a time lag of about three years. The reasons for that development inherently lie in the evolution of the German insurance system mainly shaped by three factors: the relatively high significance of insurance companies as purchasers of banking deposit facilities, the traditionally strong market attractiveness of mixed life insurance policies, leading to an increasingly growing market share (bearing in mind that at the beginning of the 1980s consumers' purchasing behaviour pattern and preferences started to shift), and the strict regulations governing the terms and conditions of insurance policies.

However, due to the introduction of capital creating life insurance policies, banks were forced to react in order to avoid a too strong decline of their market share in the retail banking services market. Following the US example of 'New Wave Policies', German commercial banks tried to counterbalance the shift in the consumer demand pattern by introducing products that pay market rates and are comparable to capital creating life insurance policies. One of these products, the 'Banksparrplan mit Versicherungsschutz' (bank's savings plan including insurance coverage) also combines an insurance and savings part. A main difference to the capital creating life insurance policies is the high transparency of both product

elements.<sup>193</sup> Apart from this transparency there exist other competitive advantages over capital creating life insurance policies:<sup>194</sup>

- the value of the savings plan is permanently accessible through weekly or monthly account statements.
- the repurchase value of a 'Banksparrplan mit Versicherungsschutz', in contrast to the repurchase value of a capital creating life insurance policy, automatically reaches the amount of all saving contributions plus interest at a certain date from the very first day of the purchase of the product. The reason is that banks, because of the less cost-intensive distribution via branches, do not charge fees for settling the deal as insurers do.
- a significant advantage is the predetermined bonus payment with completion of the savings plan, as

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<sup>193</sup> n.a., 'Banken und Versicherer im Kampf um die Notgroschen', in: Geld Magazin, vol.14, iss.7/8, 1984, pp.37-42, here p.38.

<sup>194</sup> compare Koch, P., 'Banken und Versicherungen. Kooperation und Konkurrenz;', in: Bankkaufmann, iss.11, 1987, pp.18-24, here pp.19-20; also Kürble, G. / Hamann, T., 'Sparplan mit Versicherungsschutz und gemischte Lebensversicherung als vergleichbare Produkte', in: Zeitschrift für das gesamte Versicherungswesen, vol.74, 1985, pp.371-402.

opposed to insurance policies of which the profit participating element is a priori not known.

On the other side, a bank's savings plan including insurance coverage does not enjoy any tax advantages as its competitive product is eligible to.

In the second half of 1983, Deutsche Bank, the largest commercial bank in Germany, launched its savings plan including insurance coverage to fight off competing life insurers.<sup>195</sup> The other large clearers followed in line.

In light of great pressure to market that product, the banks' biggest problem was the provision of insurance coverage. Due to banking regulations and the traditional functional separation of banking and insurance, most commercial banks in Germany lacked own insurance subsidiaries. Hence they were forced to cooperate with insurance companies to be able to provide both elements of the new product, their own savings account and the insurance part. That meant from a customer's perspective, two business partners were required to purchase a savings

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<sup>195</sup> Stracke, G., 'Financial Services in Deutschland (5): Marktstrategien der Banken', in: Die Bank, 11/1988, pp. 590-607, here p.590.

plan including insurance coverage.<sup>196</sup> Thus in terms of competition, insurers and banks de facto only competed in the savings part of the product.<sup>197</sup>

Both distribution channels, bank branches as well as the insurer's sales force, were required to market the product. That necessitated a close linkage between the bank and its partner. Deutsche Bank, for instance, cooperated with the Berlinische Lebensversicherung AG.<sup>198</sup> However, cooperation always means the sharing of profits, the amalgamation of two separate corporate identities, and the linkage of generally two independent sets of corporate objectives. In the mid-1980s German banks realized, that and as a consequence changed their strategy. They started to either establish their own insurance subsidiary, or to take over smaller insurance companies already operating in the market. The KKB Bank KGaA, hundred percent owned by Citibank, was the first commercial bank to found an

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<sup>196</sup> Remsperger, H., 'Erscheinungsformen, Ursachen und Implikationen von Allfinanz-Strategien', in: Die Bank, 6/1989, pp.299-309, here p.300.

<sup>197</sup> Rudolph discusses in a study about the strategic question whether banks should at all get involved in the insurance business the close historical relations and areas of competition between banks and insurers. Rudolph, B., *ibid*, pp.655-57.

<sup>198</sup> Deutsche Bank also started to offer separate risk life insurance policies and 'ordinary' life insurance policies via the Berlinische Lebensversicherung. Stracke, G. / Pohl, M., 'Financial Services in Deutschland (4): Marktstrategien der Versicherer', *ibid*, p.197.

insurance subsidiary on April 1, 1985, the KKB Lebensversicherung AG. Deutsche Bank, the largest German clearer followed somewhat later. It founded its subsidiary, Deutsche Bank Lebensversicherung AG, with an endowment capital of DM 30 million on September 1, 1989.<sup>199</sup> That decision was also influenced by the looming German reunification, the forthcoming Single Market in Europe, the constantly growing national insurance market, and the ability to offer 'genuine' capital creating life insurance policies, including its tax advantage, instead of savings plans with insurance coverage. Besides capital creating life insurance policies, the Deutsche Bank Lebensversicherung AG offers primarily standard products such as accident insurance and attractive risk insurance packages.<sup>200</sup> It also distributes its products solely via bank branches and integrates its marketing plan into Deutsche Bank's overall marketing plan.<sup>201</sup>

Dresdner bank, the second-largest commercial bank in Germany, chose to broker the products of existing insurance

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<sup>199</sup> n.a., 'Deutsche Bank Leben startet früher als geplant', in: Börsen-Zeitung, 22 August 1989, p.17.

<sup>200</sup> *ibid*; also  
n.a., 'Banks Stride into the Insurance Market', in: Banking World, Jan. 1985, p.42.

<sup>201</sup> Slottko, S.M., Vice-President of Deutsche Bank Lebensversicherung AG, 'Lebensversicherung am Beispiel der Deutschen Bank', in: Bank und Markt, Febr. 1991, pp.5-10, here pp.7-8.

companies, and has agreed to use Allianz as exclusive supplier in eight German states since 1989. In this context, both companies swapped significant equity stakes. Allianz, the largest insurance group in Europe, now holds a twenty-three percent stake in Dresdner bank, whereas Dresdner bought up ten percent of Allianz' share capital.<sup>202</sup>

Commerzbank employed a third kind of strategy. It decided to create a joint venture with Deutsche Beamtenversicherung, a long-established company specialising in the insurance needs of government employees. In addition, Commerzbank also took a direct forty-eight and a half percent stake in its insurance partner.<sup>203</sup>

Even the network of cooperative banks and its traditional insurance partner, R + V insurance AG, decided to intensify their already close relations.

The way these German banks have expanded into the insurance business was only possible through the favourable

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<sup>202</sup> n.a., 'A Challenger to Germany's Heavyweight Banking Title', in: Business Week, 12 August 1991, pp.36-37, here p.36; also  
n.a., 'Europe's Insurers Draw a Bead on 1992', in: The Economist, 28 Oct 1989, pp.117-118, here p.117.

<sup>203</sup> Commerzbank AG, Annual Report, 1991, p.63; also Lee, Peter, 'An Air of Vulnerability', in: Euromoney, July 1991, pp.71-76, here p.76.

national regulatory framework for banks. The following table compares permissible bank insurance activities in twenty major industrial countries.

**Permissible Bank Insurance Activities in 20 Major Countries**

Country	1988 Premium* (U.S.\$ in billions)	Sale of Insurance	Ownership of Insurers	
			Direct	Holding Co.
United States	\$431.4	No	No	No
Japan	284.6	Yes	Yes	Yes
West Germany	79.3	Yes	Yes	Yes
United Kingdom	69.0	Yes	Yes	Yes
France	52.2	Yes	Yes	Yes
Canada	26.5	No	No	No
Italy	20.0	Yes	No	Yes
Australia	18.5	Yes	Yes	Yes
South Korea	16.5	No	No	No
Switzerland	15.1	Yes	Yes	Yes
Netherlands	15.0	Yes	Yes	Yes
Spain	14.7	Yes	Yes	Yes
Sweden	9.5	Yes	No	No
Belgium	6.3	Yes	Yes	Yes
Austria	6.2	Yes	Yes	Yes
Finland	5.9	Yes	No	Yes
Denmark	4.8	Yes	No	Yes
Norway	4.7	Yes	No	No
Ireland	3.2	Yes	Yes	Yes
Israel	2.5	Yes	Yes	Yes

\*Source of data: Sigma, April 1990, published by Swiss Re. Figures are based on life/health and property/casualty combined total premiums.

**Table 10: Permissible Bank Insurance Activities in 20 Major Countries**

In tandem with the change in product strategy came a change in the distribution strategy. These products are predominantly sold via the banks nationwide branch network. According to the principle of one-stop shopping, specialized insurance service stations were implemented in large branches. Nonetheless, the close relations between both sectors of the finance industry, primarily in the area of distribution, were kept in place to mutually benefit



from each other's specialized know how (synergy effects).

In contrast to the German market, the strict separation of commercial banking and insurance in the US that virtually prohibits close cooperations and cross-shareholdings, and the business relations between investment banks and insurers, severely limited the strategic response of US commercial banks. They are not allowed to upgrade typical savings plans into capital creating savings accounts with a kind of insurance coverage, as under German law. The only possibility to regain parts of lost refinancing capital, is through the provision of very attractive redeposit facilities for life insurers via their own capital investment subsidiaries.

However, even this trick to participate in the capital accumulation within insurance companies was strongly constrained through the introduction of fund-based life insurance policies. Unlike in Germany, where this type of product - which essentially combines life insurance and securities investment - was hardly offered in the previous decade, US life insurers reduced the market potential of commercial banks by using them as follow-up products for their own capital creating life insurance policies. In so doing, the once caught savings money of private households was artificially kept out of reach of commercial banks.

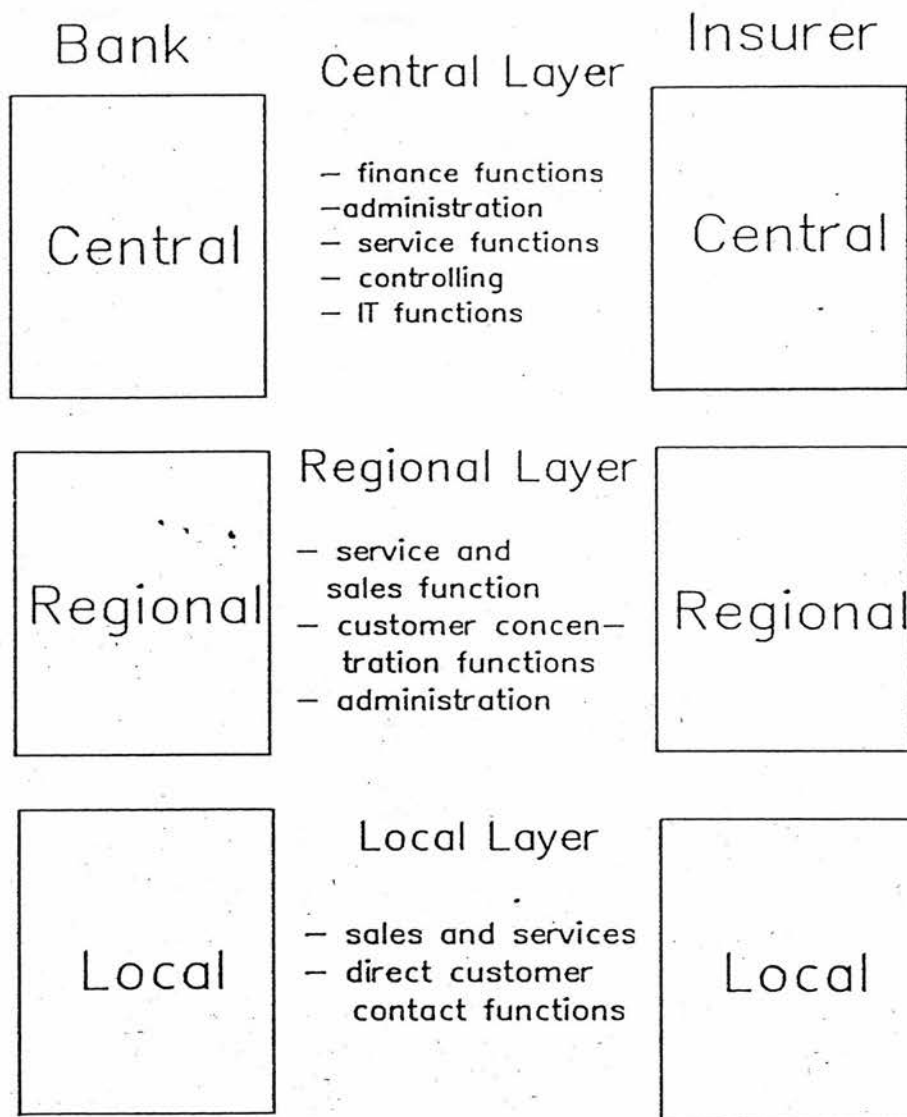
#### **4.4            Changes in the IT Strategy to Respond to Changes                  in the Market Environment**

As discussed already in the previous sections of this chapter, commercial banks in both countries attempted to fight off competition from insurance companies by forming various kinds of cooperations and alliances with them. These encompass mergers, acquisitions, establishments of insurance subsidiaries by banks, and close product alliances between banks and insurers. What has to be discussed on the following pages, is whether that general business strategy, as an answer to the market-entry and market penetration of a nonbank competitor, has led to a significant change in the banks' IT strategy ?

From a mere IT perspective, regardless of the form of cooperation that has been chosen, cooperation always means a link-up between two or more organisations with in general independent and different IT architectures. The problem of integration is hence one of the key issues to be resolved. It is therefore necessary to briefly analyze the way a bank and an insurance company could cooperate IT-wise, before discussing in detail activities of individual banks in both countries.

In so doing, it appears adequate to look at the organisational structures generally implemented within

banks and insurance companies. Both types of organisations are structured in basically three layers as indicated by figure 10.



**Figure 10: Organisational Structures of Banks and Insurers**

According to this simplified model<sup>204</sup>, the central layer is characterized by finance, service, administrative, and controlling functions. In addition, this layer is responsible for DP equipment, data processing management, systems design, development and maintenance, and the like. In contrast, on the regional layer, concentration and administration functions for the various customer target groups , and also direct customer responsibility, are the prevailing functions. The local layer (eg. branch outlets in the case of a bank, and the mobile or semi-stationary insurer's sales force) is shaped by mainly service, sales, and direct customer contact functions.

A longer-term cooperation between both partners would require integrative steps on all three layers. However, looking at the issue from a purely IT-strategic angle, one can identify primarily the central layer, because of its status as host of the main IT functions, and secondly the local layer, due to its front-end and interface position that is important to sell, for instance, newly designed financial products, as crucial layers that need to be integrated.

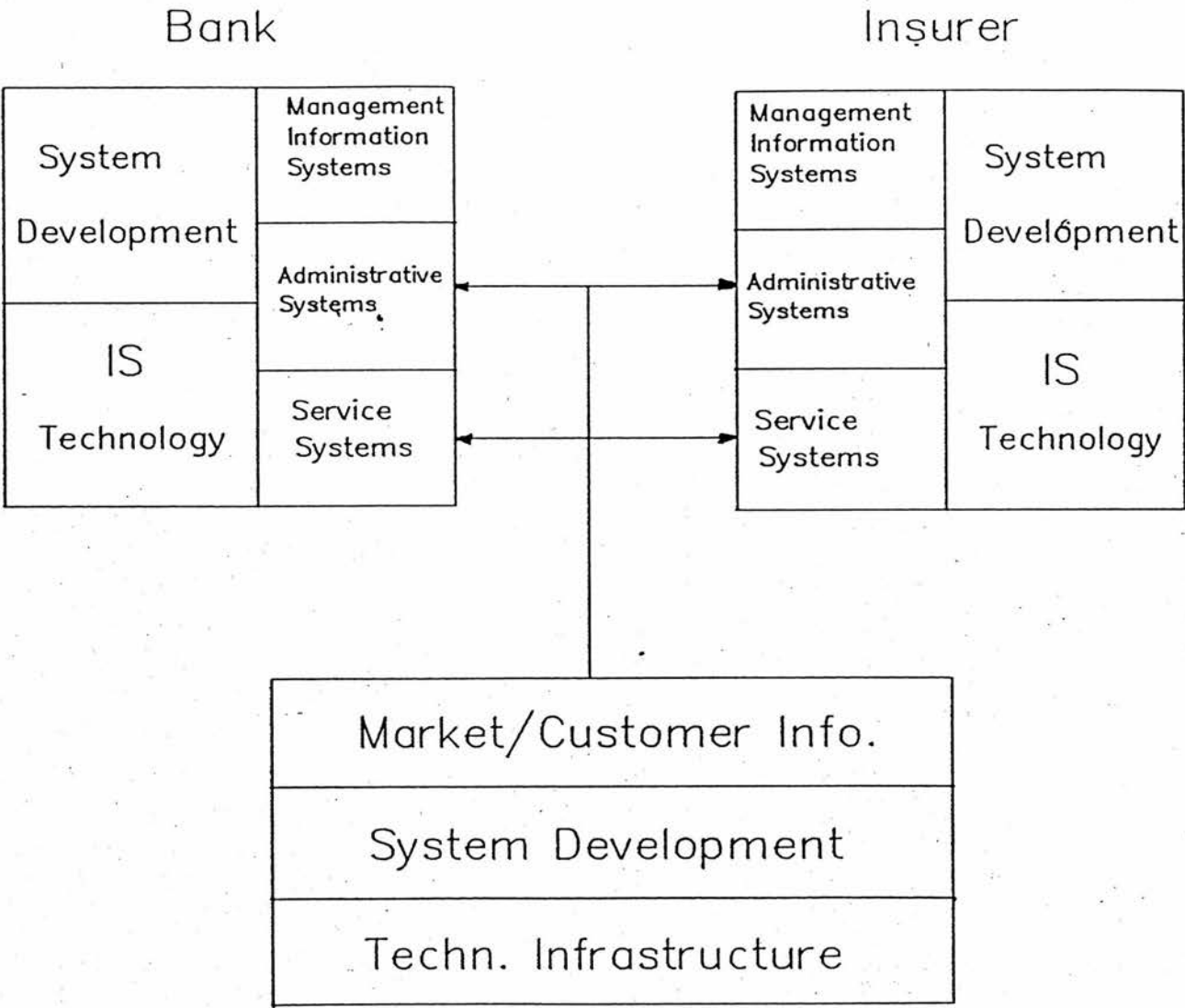
The main IT functions on the central layer of a

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<sup>204</sup> compare von Linsingen, D., 'Technik als Motor für die Kooperation von Banken und Versicherungen', in: Versicherungswirtschaft, 11/1988, pp.755-763, here p. 759.

financial institution can be classified into five groups: systems development, IS technology, service systems, administrative systems, and management information and reporting systems. The systems development category encompasses all processes related to system analysis and design, maintenance of software applications, integration of different applications, and the like. Under the heading IS technology, the wide area of DP centre management can be understood. That includes the installation and maintenance of banking hardware, from mainframes down to personal systems, the processing of day-to-day transactions, and all related tasks. The service system function is responsible for the technical infrastructure. That consists of communication links such as local or wide area networks, related services such as bridge applications and network software, self-service components and other electronic banking facilities. The heading administrative systems has been deliberately chosen very vaguely to include the vast area of customer and market data. This function encompasses the whole range of bank typical database systems related to banking services (ie savings and other deposit systems, short-, medium-, long-term credit systems, time deposit, or securities systems), and external market information (ie Reuter's database, stock exchange information). Finally, the management information and reporting systems function comprises of all kinds of bank controlling systems.

Elaborating from this recognition, it is possible to deduct and pinpoint those IT activities that must be tackled and changed within a bank - if necessary - to implement a functionable link on the central layer of both organisations, and also to outline the necessary IT activities to be addressed in order to build up the cooperation from an IT point of view.



**Figure 11: Organisational IT Model**

Both organisations store and process their customer and market information in different ways and systems. In order to launch a bundled service or a newly designed product, with elements of both partners, the existing customer and market data need to be integrated and mutually accessible. This could be done on the banks' side - only the commercial banks' side will be analyzed in the following because of the focus of this investigation - through changes in its customer and market information systems. Secondly, the expansion of the banks' product range also requires new application systems and databases to be created in order to support those new services. The specifications and requirement profiles are thereby determined by both partners. Finally, the link-up between both partners can only be implemented if the technical infrastructure - that is communication components such as network links, computer-to-computer communications, and bridge programs - is in place.

Competition in these new products and services will ultimately be won or lost on the local layer, that is in the branches and through the sales force. Hence, also this layer requires IT investment such as terminals, LANs, portable PCs, communication functions with the central layer, and access to centrally stored data.

In what way individual commercial banks in both



countries have actually tackled the problem of cooperation between both types of organisation, will be analyzed in the next two sections.

#### **4.4.1 IT Strategies Formulated by German and US Banks**

All commercial banking groups of the German universal banking system, cooperative, savings, and large clearing banks, were equally hit by the market-entry of insurance organisations, and had to react with regard to their IT strategy. In the following, the network of individual cooperative banks and the large clearers will be analyzed in more detail.

From a mere IT perspective, the network of individual cooperative banks and the large German clearers are organised in a very similar and hence comparable way. Whereas the large clearers run their own DP centres and technology groups, the organisation of cooperative banks in Germany has set up an independent organisation, the Fiducia Informationszentrale AG (in the following simply called Fiducia), that serves the DP and IT needs of cooperative banks in the south and southwest of Germany. A similar institution was established in the northern and mid-western region of Germany. In terms of computer power, equipment, and IT responsibilities, Fiducia fulfils tasks similar to those of the IT function of, for instance,

Deutsche Bank. Whereas Deutsche Bank's central IT organisation handles the IT needs of hundreds of branch outlets all over Germany, Fiducia serves the IT needs of, in 1990, 572 individual and independent cooperative banks hooked up with the institution.<sup>205</sup>

Both the IT needs and requirements of a branch outlet, and those of an averaged-sized cooperative bank, are very similar due to the range of products and services being offered in these institutions which is almost identical. For the purpose of this investigation, therefore, Fiducia's individual partner banks and the large clearers branch outlets will be treated as comparable entities from an IT point of view. Hence, analyzing Fiducia's strategic response to implement the cooperation between insurer and bank, and supporting it with a brief analysis of the IT activities undertaken within Deutsche, Dresdner, and Commerzbank, culminates in a clear picture of the strategic response of the German commercial banks in terms of IT.

Before discussing in detail individual IT activities that had to be undertaken and their aggregated significance, it is necessary to briefly outline the general IT strategy in place at the time (1985) when the

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<sup>205</sup> Fiducia Informationszentrale AG, Annual Report, 1990, p.15.

market-entry of insurers occurred.

In 1984, Fiducia<sup>206</sup> ran a large database system called FIDIS / GENOS<sup>207</sup> based on a hierarchical organisation that operated the banks front-office business. This system offered a 24 hours online service and was accessible via APL (Advanced Programming Language) database routines. It stored and processed service-related data for a whole range of services required for the daily business in a retail bank, such as various kinds of savings account deposits, credit services, time deposit accounts, securities investment accounts etc. With regard to the model developed in the previous section, GENOS could be identified as the cooperative banks' central customer data management and service system.

In 1985, with the appearance of relational database systems (ie DB 2) and their inquiry tools such as AS (Application system) and SQL (Structured Query Language), requests by many partner banks for more online services, easier database access facilities, increasing GENOS transaction figures, and more market-related information

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<sup>206</sup> The following analysis is based on the findings obtained through extensive interviews with executives within Fiducia's application development and controlling functions.

<sup>207</sup> Fiducia Informationszentrale AG, Annual Report, 1984, p.10.

and customer profitability requests, a strategy was formulated to gradually transform the GENOS database system into an information system based on relational database structures.<sup>208</sup>

The strategy was to be implemented according to a three-phased plan.<sup>209</sup> In stage one, the operational database segments (GENOS segments) managing the daily business of a bank were to be migrated into the new database shell. In a second step, the application programs accessing the database system needed to be modified according to the new data model and tools. During the third step, towards the end of the 1980s, data of related organisations, such as the R + V insurance group and the Bausparkasse Schwäbisch Hall (BSH), with which a cooperation agreement existed dating back to the 1960s, and other external data sources, for instance stock exchange news, should also be integrated into the new database system. In other words, the evolution of the GENOS system was planned as an incremental process, in which the link-up with related organisations was only of secondary importance in the first place. Furthermore, the availability of the required technology, such as relational database systems and their

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<sup>208</sup> also compare Fiducia Informationszentrale AG, Annual Report, 1985, pp.18-19.

<sup>209</sup> unpublished presentation by Degener, R. of Cooperative Bank Göttingen, Göttingen, 1986, pp.145-147.

data entry and inquiry tools, was certainly an important factor in the investment decision-making process.

However, in response to the market-entry of insurance companies, the above strategy had to be changed. Project activities, application development, and technology investments that were scheduled two to three years later were made earlier. Fiducia intended a much closer link-up with its traditional partner, the R + V insurance group. That meant in detail:

- (a) Access to R + V's customer data files had to be realized. To achieve this, Fiducia created a new database system called Ruvis<sup>210</sup>, that was essentially a reduced image copy of R + V's customer database including customer's name, address, and policy details. In that context various project teams were engaged in coding database extraction and match-code programs. These programs were necessary, because Fiducia's internal data identification and customer key system was completely different from R + V's equivalent.
- (b) With regard to application development activities, a new online dialogue system was developed to access

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<sup>210</sup> n.a., RZ-Aktuell, special edition, Sept. 1991, p.22.

the insurance information as part of the Ruvis-system. This dialogue system was offered to individual cooperative banks as an additional GENOS service.

- (c) In order to implement a quick communication link between Fiducia and R + V within the cooperative network called GENO-net, data transfer was conducted via physical exchange of tapes and cartridges. In a second step, almost two years later (mid-1987), this data exchange was done via electronic file transfer by a computer-to-computer communication line that was installed for that purpose.<sup>211</sup>

These activities, including the purchase of required IT kit such as DB 2, AS, or NetMaster software licences<sup>212</sup>, ran parallel - but with a high priority - to the original IT strategy of re-organising the GENOS segments. In terms of duration of these activities, a functionable link between Fiducia and R + V, and the availability of online access from individual partner banks was reached in the first half of 1986, more than a year after the decision to respond to the market-entry of the nonbank competitor.

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<sup>211</sup> n.a., RZA-Extra, Dec. 1991, p.4, also Fiducia Informationszentrale AG, Annual Report, 1987, p.14.

<sup>212</sup> IBM trademarks.

The cost of the above design and integration activities amounted to:

- cost of purchased software licences DM 550,000
- additional cost of database licences DM 300,000
- project cost to design the online system DM 350,000
- cost related to system integration and communications  
DM 2,000,000

Both Dresdner Bank, which chose a close cooperation agreement with Allianz, and Commerzbank, which implemented a cooperation with Deutsche Beamtenversicherung (DBV) including the purchase of large equity stakes, essentially pursued the same approach in terms of IT as in Fiducia's case. The required IT activities -mainly software and related integrative tasks - to establish these links are virtually identical except for company-specific differences. One of those was the establishment of a standardised IT platform among Commerzbank's cooperation partners. They agreed to jointly develop standard user access menus, use the same PC architectures, operating systems etc., to enable sound links and data exchange between the partners. In addition, by following the way of cooperation, investment costs for the purchase of an entire insurance application package were not incurred as in the case of Deutsche Bank.



Similar to Fiducia's original IT strategy of an evolutionary development of the central customer management system, Dresdner Bank, Deutsche Bank, and Commerzbank too had decided to gradually change their respective systems, although the time frame chosen was much longer. The availability of relational database technology, for instance, did not immediately lead to redesign projects, the creation of a new database shell, and extensive maintenance activities on all related software packages. Moreover, these banks internally agreed to design new applications, if demanded by the market, based on the new technology, and to create bridge and conversion programs in order to ensure program-to-program communications with the original, central customer management system. Parallel to these activities, individual applications had to be incrementally migrated to the new technology platform.

In the case of Deutsche Bank, which decided to establish an insurance subsidiary from scratch, a completely new IT infrastructure had to be created. Essentially, the IT activities required were very similar to the ones Fiducia performed in 1986/87, although on a broader scale. Firstly, in Jan. 1989 Deutsche Bank purchased a central insurance application package (called VVS) on the market, and subsequently modified it within the next nine months according to its standards. Hence,



extensive redesign and project costs were incurred on top of the initial purchase price. The overall cost of quickly providing a workable application amounted to roughly DM 12 Million. Due to the fact that the parent company decided to run this application on their central mainframe, additional CPU and storage device utilisation costs, and expenses for several high speed communication lines between the subsidiary and the parent's central DP centre were also charged. This cost block amounted to DM 4.5 million in 1989.<sup>213</sup> These issues in 1989 led to another cost item of initially DM 5-6 million with double digit cost figures in the years 1990 and 1991.

Secondly, with regard to the document and insurance contract management within the subsidiary, a scanning and document retrieval system called FileNet with 126 Personal Computers, large optical disc storage facilities, and client-server communications based on physical bus network technology (Ethernet) was purchased and installed. This system has enabled the Deutsche Bank Lebensversicherung AG to handle 1.5 million documents since its foundation in Sept.1989, without transferring a single piece of paper. Through this system the entire customer function such as

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<sup>213</sup> This cost block increases dynamically in line with changes in transaction volumes regarding insurance contracts. Hence, by now (end of 1992) it will be certainly between DM 5-6 million due to increased sales of insurance policies.

contract details, address changes, or printouts of life insurance account balances and the like is performed decentralised. In addition, several bridge programs had to be developed to ensure a constant match between the customer data captured in the central insurance application and the decentralised service solution. The overall cost of these IT activities added up to DM 6 million.

Thirdly, in order to establish a link between Deutsche Bank's internal customer management system called Cerberus and VVS, several project teams were involved in creating database matchcode and extraction programs. To facilitate a smooth funding of these IT activities, Deutsche Bank generated a special fund in the sense of a systems expense budget with roughly DM 50 million in 1989 and DM 30 million in 1990. About 80 percent of this budget was taken up by the above IT activities, front-end activities on the local layer which will be mentioned below, and other related activities such as intense training courses to operate the new applications.<sup>214</sup>

The above examples and the general strategy analysis of the previous section have shown that commercial banks

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<sup>214</sup> Deutsche Bank, for instance, trained eight thousand employees between 1989-90 to operate these insurance applications and to be able to counsel customers.

decided to sell insurance policies via their branch outlets. This brings us to the local layer of the model illustrated by figure 10. Selling insurance products besides typical bank and savings services in a branch outlet represents a substantial expansion of the product range offered to retail banking customers. This situation *inter alii* requires the decentralised availability of the insurance application on the local layer.

Insurance products, unlike for instance savings account services, require more intense financial advice and knowledge from an individual bank employee. This means at least two things for a commercial bank. Firstly, a general skill problem has to be overcome, a factor that will not be looked at any further in this dissertation, and secondly a satisfactory IT platform needs to be available within a branch to be able to provide this enhanced financial service. This requirement and the fact that retail banking customers expect more "financial engineering" of a bank employee to create suitable solutions tailored to their individual set of needs (see section 2.4), influences the profile of the job environment. A certain polarisation trend is observable. On one side customers expect convenient and quick service for routine banking transactions, through for instance various kinds of self-service components. On the other, however, they demand sophisticated financial consulting

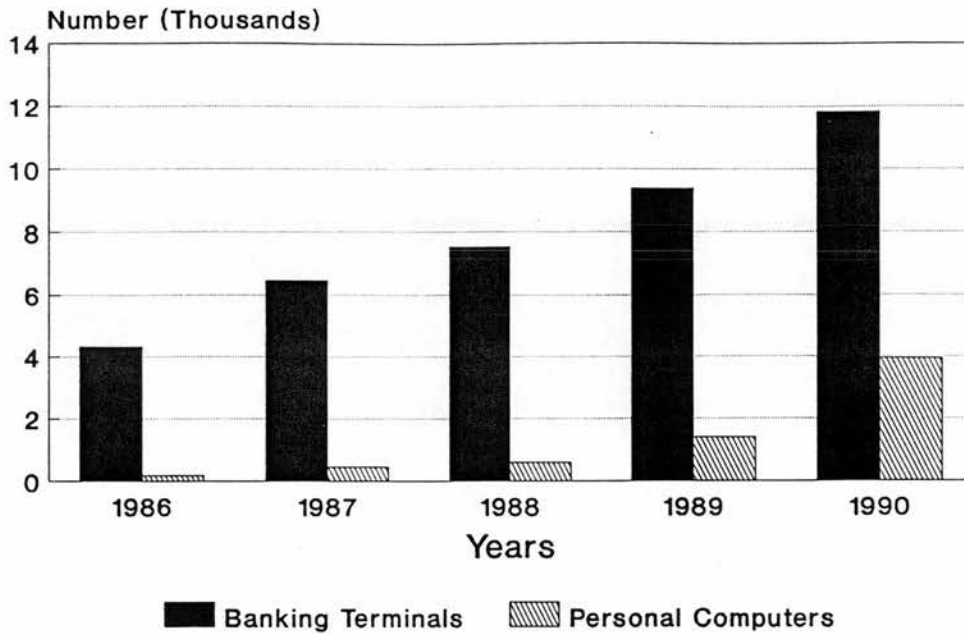
covering a whole array of services, ranging from insurance policies, house financing and property facilities, investment banking products, to all kind of credit services. Such a job environment could be called an Integrated Financial Services Consulting Station (IFSCS).

From an IT perspective, such a service station necessitates decentralised computer power on the local layer, and communication facilities with the central layer. In the case of Fiducia's RUVIS system, this insurance application must be available as an integral part of the IFSCS in each individual partner bank. As a consequence of this recognition, Fiducia increased the number of installed personal computers and terminals between 1986-87 by 159 percent, from 187 to 455, (see figure 12 below) and by 50 percent from 4321 to 6470.<sup>215</sup>

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<sup>215</sup> Fiducia Informationszentrale AG, Annual Report 1990, p.25.

## Terminalisation 1986-1990



Source: Fiducia, Ann. Report 1990, p.25

**Figure 12: Fiducia's Terminalisation between 1986-1990**

In a similar way, Dresdner Bank increased its number of personal computers devoted solely to retail banking between 1987-91. In 1987 they grew by 55 percent, in 1988 by 44 percent, in 1989 again by 33 percent, and in 1990, as well as in 1991 by 27 percent.

Thus, parts of this hardware cost<sup>216</sup> also have to be regarded as cost attributable to the strategic defense of the nonbank entry. However, it would be wrong to conclude

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<sup>216</sup> Fiducia during this time was hundred percent devoted to IBM hardware. Thus, IBM's own installation and sales records provide accurate data about these cost items.

that only the market-entry of insurers was a motive for the purchase of this IT equipment. It was imbedded into the general trend towards an 'Allfinance-strategy' and the related issue of IFSCS by most German commercial banks. Hence it is impossible to work out what percentage of the hardware cost is exactly attributable to the market-entry of insurers. The total investment cost concerning personal computers amounted up to DM 2 million, and more than DM 10 million was spent on other types of banking terminals.

In line with the general tendency towards 'Allfinance' and due to the fact that Deutsche Bank decided to sell insurance policies via its already existing nationwide branch network, substantial computer power had to be installed on the local layer. Similar to Fiducia's way of thinking this meant: (a) the purchase of initially (in 1989) several hundred personal computers to create the hardware platform for an IFSCS environment in the branch outlets, and (b) in order to realise the vision of bank and insurance products 'out-of-one-hand', an additional online dialogue application had to be programmed and integrated into the standard banking services dialogue system, to enable bank employees to provide adequate service concerning insurance products. Furthermore, a file transfer facility had to be created to transfer the locally captured customer and policy data from the branch into the central VVS application system.

Commerzbank, in contrast, did not invest in a company-wide IT platform within the interval 1980-90. It waited until the first half of 1992 to acquire a similar number of PCs and workstations as Deutsche Bank had done two years before. In order to be able to provide decentralised computer power, however, Commerzbank in 1990 equipped its employees with laptops dedicated only to the insurance business.

The aggregated sum of these hardware and components cost, and the design cost presented above already - in Fiducia's case - amounted to roughly 30 percent of the IT budget devoted to the retail banking function in the year 1986/87. In the case of the other three large German clearers, the establishment of life insurance subsidiaries and all related IT activities in the year 1989, also created an investment figure of well over twenty percent of the IT expenditures targeted at the retail banking function. In this context, it is worth noting that Dresdner Bank and Commerzbank showed lower budget and investment totals (but similar investment ratios expressed in percentage points) in comparison to Deutsche Bank which decided to set up its own subsidiary from scratch. This difference on the other hand needs adjustment in recalling the fact that both banks purchased significant stakes in its partners. Both partners, Allianz and DBV, however, are large insurance companies which run well equipped DP

centres that also incur substantial systems expenses expressed in the administrative cost block of their balance sheets. By purchasing for instance an almost 50 percent equity stake, 50 percent of the partner's IT expenses are automatically purchased as well. These costs must be added to the traceable IT activities and related investment cost as discussed on the previous pages. Due to a lack of information it is impossible to work out this "acquired cost block" for Dresdner and Commerzbank. Hence, the apparent cost difference between Deutsche Bank, where most IT cost is visible, is certainly smaller than expected in the first place when the factor of 'acquired IT cost' is taken into consideration.

Thus, the market-entry of a nonbank competitor into the German retail banking services market led to reactions within the commercial banking sector in terms of IT. Fiducia's reaction could be thereby identified as the first major response of German commercial banks. With a time lag of roughly 15 months to the market-entry of insurance companies, a significant proportion of the IT budget was devoted to finance IT activities directly related to the strategic response of the banks. Furthermore, investments that were planned two to three years later were made much earlier to react to the increase in competition.



In the US market, none of the large commercial banks that were asked indicated significant IT activities to respond to the market-entry of insurers. Moreover, the strict regulatory separation between the commercial banking and insurance industries, impeded similar cooperation agreements or de novo establishments of insurance subsidiaries as in the German market that would have required substantial IT investments up to the significance level of twenty percent of the IT budget devoted to retail banking. Hence, a change in the US banks' IT strategy to respond to the market-entry of insurance institutions was not observable.

Traditionally, capital creating life insurance policies were prioritised investment and savings instruments in private households' portfolio of investment activities in the US. Until the 1970s they ranked much higher than in Germany. These investments represent highly competitive products compared to typical banking deposit facilities because of their security, long-term nature, tax deductibility, and returns. However, due to competitive money market products and the beginning of the deregulation of interest rates, these products increasingly lost market attractiveness in the US retail banking market at the beginning of the 1980s. As a consequence of the cooperation between insurance companies and investment banks, and the resulting introduction of new insurance services, the 'New Wave Policies', this trend could be slightly reversed from the mid-1980s onwards. In comparison with the development of capital creating life insurance products in the German market throughout the 1980s, where a steady growth was observable, a relative decline of importance must be noted. Nevertheless, the strategic alliances between insurers and investment banks represented strong competition to US commercial banks in the retail banking market.

Within this competitive market environment, US commercial banks were in a relatively impeded market position to respond to the market-entry. Due to the strict regulatory separation of commercial banking and insurance, cross-shareholdings were prohibited and business cooperations between both industries were severely constrained. In addition, US life insurers reduced commercial banks market potential by routing insurance savings funds into the investment banking sector without participation of commercial banks.

In Germany, competition between the insurance and banking industry was traditionally less strong in comparison to the US. This is true due to four main factors:

- (a) Enterprises of both financial industries hold significant shareholdings of companies belonging to the other industry
- (b) Insurance companies provide the banking sector with substantial redepositing facilities
- (c) In financing other sectors of the economy, insurers tend to utilize typical banking services as an intermediary

- (d) The creation and provision of capital creating and other life insurance policies is predominantly done via cooperations between banks and insurance companies

This initially relatively friendly competitive situation in the German market increasingly intensified throughout the second half of the 1980s, with banks establishing their own subsidiaries. The resulting competitive pressures for members of both industries were accompanied by the following factors that increasingly gained market relevance: (1) banks were faced with an increasing yield and price sensitivity of customers, and a general tendency towards capital creating life insurance policies and securities investments, and (2) insurance companies also focused on their own capital gathering function, by introducing financial innovations that combine risk insurance components with various kinds of capital creating elements, in order to sustain their level of profitability. Furthermore, due to decreasing savings ratios in Germany, the competitive rivalry over first deposit facilities between banks and insurance companies is expected to intensify even further.<sup>217</sup>

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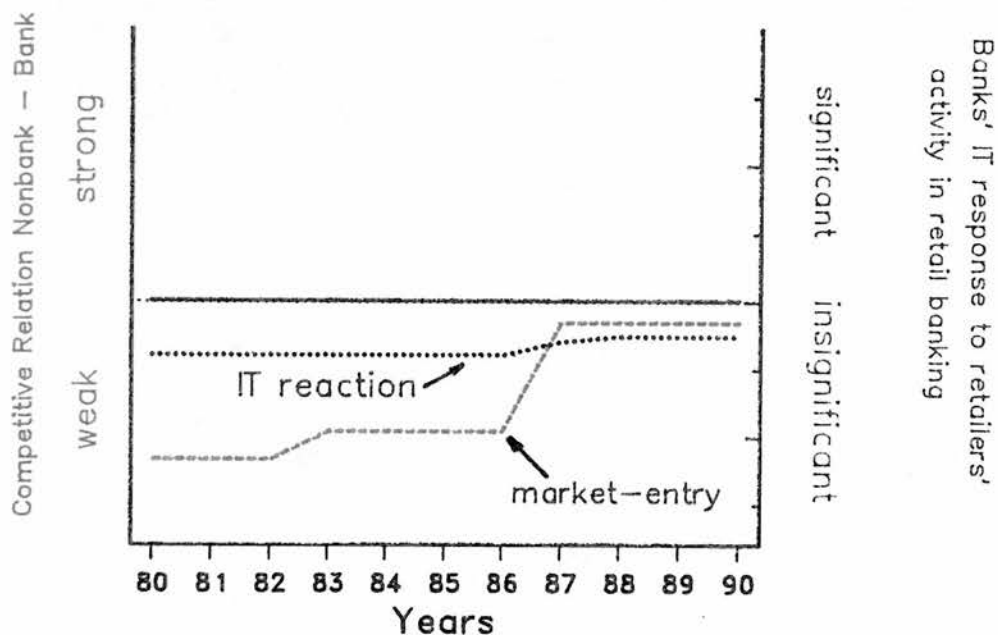
<sup>217</sup> Schwebler, R., 'Kampf der Giganten oder neues Stadium in der Kooperation von Banken und Versicherungen?', in: Versicherungswirtschaft, vol.41, 1986, pp.7.

In the US, the market entry of life insurers, on a broad scale, occurred at the end of 1984 and the beginning of 1985 with the launch of new wave policies. The market introduction of modified whole life policies, about one year earlier, represented just an interim stage. Due to the regulatory restrictions and the limited insurance powers that have been discussed already, and the fact that commercial banks did not regard insurance companies as a serious threat, hardly any significant strategic reply, such as cooperations or takeovers, that could have required a change in the banks IS strategy happened throughout the 1980s. The following diagram illustrates this relationship.<sup>218</sup>

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<sup>218</sup> This diagram is only intended to illustrate the market-entry of a nonbank competitor and its effects on the competitive reaction between bank and nonbank in the year of the market-entry, and commercial banks' IT reaction to this market-entry after a certain time-lag. The years before and after the market-entry and the IT reaction respectively are not relevant in light of the hypothesis under investigation. Hence, they are held quasi-constant, which leads to the idealised shape of both graphs. In addition, the IT expenses with regard to this nonbank competitor are perceived to be insignificant before and after the IT response occurred. Similarly, the competitive relation between bank and nonbank, after the market-entry, is assumed to remain on the intensified level. Furthermore, due to the focus of this investigation on the dates of the market-entries and IT reactions, and the fact that IT cost data could only be obtained at the end of the accounting periods of the interviewed banks, peaks might be illustrated in the case of the IT response graph.

# **Banks' IT reaction to the market-entry of insurers into the US retail banking market**



**Figure 13: Banks' IT Reaction to the Market-Entry of Insurers into the US Retail Banking Market**

In the German market, in contrast, banks perceived the market-entry of insurers completely differently. At the end of 1982, a first wave of capital creating life insurance products was thrown on the market, which was only moderately answered by commercial banks via products

such as the 'Banksparrplan mit Versicherungsschutz'. In the process, cooperation agreements with insurance companies were the preferred strategic response that did not culminate in significant IT investments. However, the launch of financial innovations according to the pattern of new wave policies in the second half of 1985, and takeovers of banks by insurance companies triggered substantial IT activities. Fiducia's reaction in 1986 (which stands for about 25 percent of the entire German retail banking market), can be identified as the German commercial banking industry's year of a major strategic reply. Despite the fact that KKB Bank, which is only an insignificant player on the German market, on April 1, 1985, was first in establishing an insurance subsidiary.

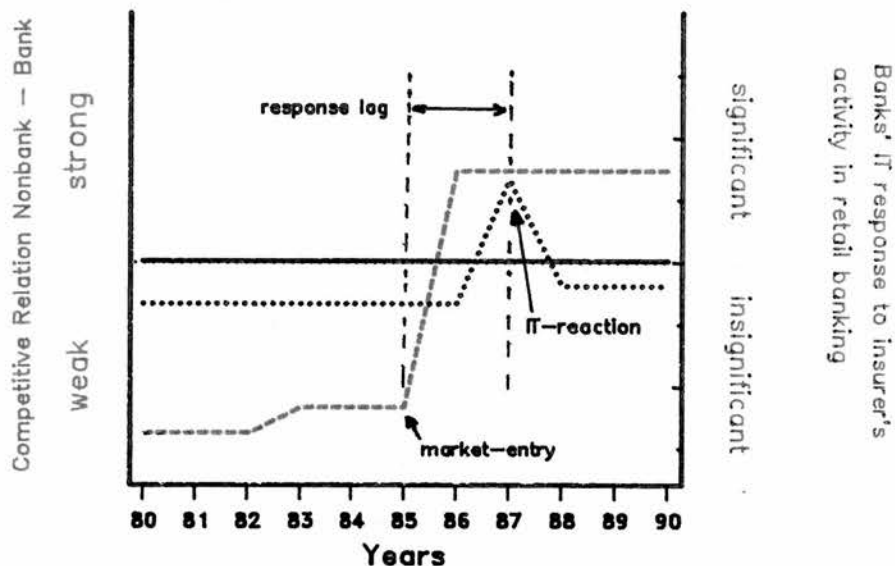
The IT activities required to reply to the market-entry of these nonbank competitors encompassed substantial programming and system integration activities, database design projects, investment in software licences, and various hardware components such as terminals, PCs, and communication facilities. The aggregated cost of these IT activities, expressed as a percentage figure of the IT budget devoted to IT expenditure and investments in Fiducia's retail banking function in the year 1986/87, amounted to roughly 30 percent. A similar figure was spent in 1989 by Deutsche Bank (well over twenty percent of the



retail banking budget devoted to IT investment), when it decided to create its own life insurance subsidiary, and by Dresdner Bank and Commerzbank through close cooperation agreements. Hence, these IT activities represented a significant change in the banks' IT strategy to respond to the market-entry of life insurers into the retail banking market. In addition, IT investments that were planned two to three years later had to be made much earlier, due to the competitive pressures created by the nonbank market-entry. The following diagram illustrates the relationship between the market-entry of the nonbank competitor, and the change in the banks' IT strategy. The red-coloured graph thereby describes the competitive relation between nonbank competitor and the banks, whereas the green-coloured graph illustrates the banks' strategic response in terms of IT. According to our measurement process of the IT variable, the aggregated cost of the IT activities specified in the previous section is expressed as a percentage figure of the IT budget devoted to IT investments in the retail banking function of the bank in the year of the strategic response, they are then compared with the significance level of twenty percent, and finally plotted below or above the level of significance.



# **Banks' IT reaction to the market-entry of insurers into the German retail banking market**



**Figure 14: Banks' IT Reaction to the Market-Entry of Insurers into the German Retail Banking Market**

## **5. The Market-Entry of Thrift Institutions**

### **5.1 Development of Bausparkassen and Thrift' Products as Substitution Potential to Bank Deposits**

Both, the German Bausparkassen and the US thrift institutions were traditionally engaged in the long-term mortgage lending and property finance business. Both types of institutions were also clearly distinctive from commercial banks in that they were not part of the banking sector and separately supervised and regulated (see section 3.2). Because of this situation they are regarded as nonbanks, but due to the relative closeness of their products and services to commercial banks' range of services they are commonly known as near-banks.

Under the German Bausparkassen-system, the Bausparkassen (the German equivalent to Building Societies in the UK) in general promote Bauspar contracts as cost efficient financing vehicles for private households to obtain property (this includes the building of houses, the purchase of houses or flats, and refurbishment activities to sustain the property).

The main idea of a Bauspar contract is the so-called 'saving-in-advance aspect (Vorsparaspekt)',<sup>219</sup> and the combination of a savings and credit element. This concept means that a customer who has signed a Bauspar contract first of all has to pay monthly contributions into a specifically allocated deposit account over a fixed period of time, with a fixed interest rate, generally 2.5, 3, or 4 percent depending on the duration of the contract.<sup>220</sup> Once the customer has reached the pre-set savings limit, he is eligible to a low-interest loan with rates two percentage points higher than the deposit rates. He then is in the position to either exercise the option and to take up the loan, or to waive it. Similar to the competitive situation in the building societies' market in the UK, where all larger societies followed the rate recommendations provided by the BSA (Building Societies Association)<sup>221</sup> resulting in a quasi-monopoly in the provision of mortgages until the mid-1980s, the Bausparkassen collectively offer the above mentioned interest rate

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<sup>219</sup> Stracke, G. / Pohl, M., 'Financial Services in Deutschland (2): Marktstrategien der Bausparkassen', in: Die Bank, 08/1987, pp.412-439, here p.424.

<sup>220</sup> for a detailed description of the rate system see Schmitz-Morkramer, G., 'Deutsche Bank Bausparkasse auf Erfolgskurs', in: Die Bank, 05/1988, pp.278-281, here p.279.

<sup>221</sup> Callen, T.S. / Lomax, J.W., 'The Development of the Building Societies Sector in the 1980s', in: Bank of England Quarterly Bulletin, Nov. 1990, pp.503-510, here p.503.

scheme.

The advantage of the Bausparkassen-system for an ordinary saver is the low-interest loan which is often well below going market rates. On the other hand, the customer has to pay a fixed commission (a certain percentage figure of the total value of the loan) when signing a Bauspar contract, and the loan is only obtainable at a certain date (the allocation cannot be postponed) in its entire value (partial allocation of the loan is also not permitted).

Throughout the 1970s and until 1980, the Bausparkassen-system showed steady growth due to the fact that (1) it was easy to understand by ordinary savers, (2) it was integrated in the wealth accumulation programme of the government for low-income savers, (3) it benefitted from the general increase in wealth and standard of living resulting in the desire for house ownership. However, the first years of the 1980s were shaped by decreasing profit margins and a decline of new business. This trend was the consequence of market saturation tendencies, rising unemployment rates, and decreasing savings ratios due to the second oil price shock and the subsequent recession, a sharp reduction of government expenditure for the wealth accumulation programme, and a changing structure of the private house building market( less multi-family houses

were built in that time<sup>222</sup>).<sup>223</sup> Thus, the Bausparkassen were forced to look for other ways to generate profits.

Again similar to the developments in the UK, the Bausparkassen in the first half of 1985 made inroads into the retail banking deposit market by introducing products which were similar to savings accounts. The first product of that kind - the BHW Dispo 2000 - was launched on Febr. 1, 1985 by BHW, the second largest Bausparkasse of the German market.<sup>224</sup> These products essentially represented a development of Bauspar contracts as instruments of housing and property finance into relatively high yielding savings accounts, as compared to normal bank savings accounts which paid only 2.5 percent interest.

Apart from the attractive returns, these innovative products carry the following features which indicate the development out of the rigid Bauspar contract as mentioned

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<sup>222</sup> In 1984, a total of 400,000 houses (houses include flats and apartments) were completed in West Germany. This figure shrunk to 300,000 in 1985, and reached its lowest point in 1986 with roughly 230,000 new houses. van Hooven, E., Member of the Board of Directors of Deutsche Bank, press conference speech on 13 March 1987, pp.1-13, here p.4.

<sup>223</sup> For a detailed discussion of the reasons that influenced the market of Bausparkassen see Stracke, G. / Pohl, M., 'Financial Services in Deutschland (2): Marktstrategien der Bausparkassen', *ibid*, pp.421-422.

<sup>224</sup> For a ranking of the largest Bausparkassen see Appendix 3).

on the previous pages, and also qualify their substitution potential to bank deposit products:

- (a) partial withdrawal of the deposited money is possible without losing parts of the loan
- (b) in case of rejection of the loan by the customer, the commission plus interest is automatically paid back
- (c) partial allocation of the loan can be negotiated
- (d) it is possible to opt for higher interest rates (and also a longer duration) after having signed the contract

In the US market, the market-entry of thrift institutions was mainly triggered by a significant change in the banking legislation. Traditionally, thrift institutions were specialised on long-term savings accounts and the mortgage lending business.<sup>225</sup> But they were not allowed to offer any kind of sight deposits or checking accounts, which meant that competition with commercial banks in the area of payment transactions was virtually impossible, and that the thrift's asset

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<sup>225</sup> see Rose, P.S., The Changing Structure of American Banking, *ibid*, p.307; also Kaufman, G., The US Financial System, Englewood Cliffs, New Jersey, 1980, pp.150.



portfolios tended to be rather inflexible. A large proportion of assets was fixed on a low interest rate level with long durations. In 1985, for instance 61 percent of S & L assets were devoted to mortgage loans, many of which carried fixed interest rates or contract loan rates that could be changed only on a limited basis.<sup>226</sup> These inflexible asset portfolios, paired with high risk lending activities was one of the main reasons, inter alia, for the thrift crisis in the 1980s. In contrast to Bausparkassen, however, thrift institutions were permitted to offer a wider range of services related to residential finance and long-term saving.

The passage of the DIDMCA in 1980<sup>227</sup>, which for the first time permitted the provision of sight deposits and the usage of cheques and credit cards to utilize these accounts, and the Garn-St.Germain Act of 1982<sup>228</sup> that extended these rights, constituted the opportunity for thrift institutions to compete with commercial banks in

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<sup>226</sup> Rose, P.S, 'The Changing...', *ibid*, p.307.

<sup>227</sup> see Frazer, D.R. / Kolari, J.W., The Future of Small Banks in a Deregulated Environment, *ibid*, pp.47-53; also McNeill, C.R., 'The Depository Institutions and Monetary Control Act of 1980', in: Federal Reserve Bulletin, vol.66, 1980, pp.444-453, here p.450.

<sup>228</sup> Moran, M., 'Thrift institutions in Recent Years', in: Federal Reserve Bulletin, vol.68, 1982, pp.726-738, here p.737; also section 1.3.4.1.

the consumer finance and third-party payment market.<sup>229</sup>

As a consequence of the DIDMCA, thrifts in 1981 started to offer so-called NOW-accounts<sup>230</sup> (Negotiable Order of Withdrawal), which are similar to typical checking accounts, and also diversified into money market accounts.<sup>231</sup> In addition, the provisions of the Garn-St.Germain Act of 1982 widely enhanced thrifts' power to offer demand deposits (ie the introduction of Super NOW accounts was permitted<sup>232</sup>) and to engage in the consumer and business loan market. Thus, by the end of 1982, thrifts were in the position to leave their competitive insularity and to severely cut into the entire consumer finance and deposit base of commercial banks. At least in the beginning, thrifts thereby benefitted from a legal right to offer interest rates 0.25 percent above those of commercial banks which were bound because of the

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<sup>229</sup> Gondring, H.P., *ibid*, p.149.

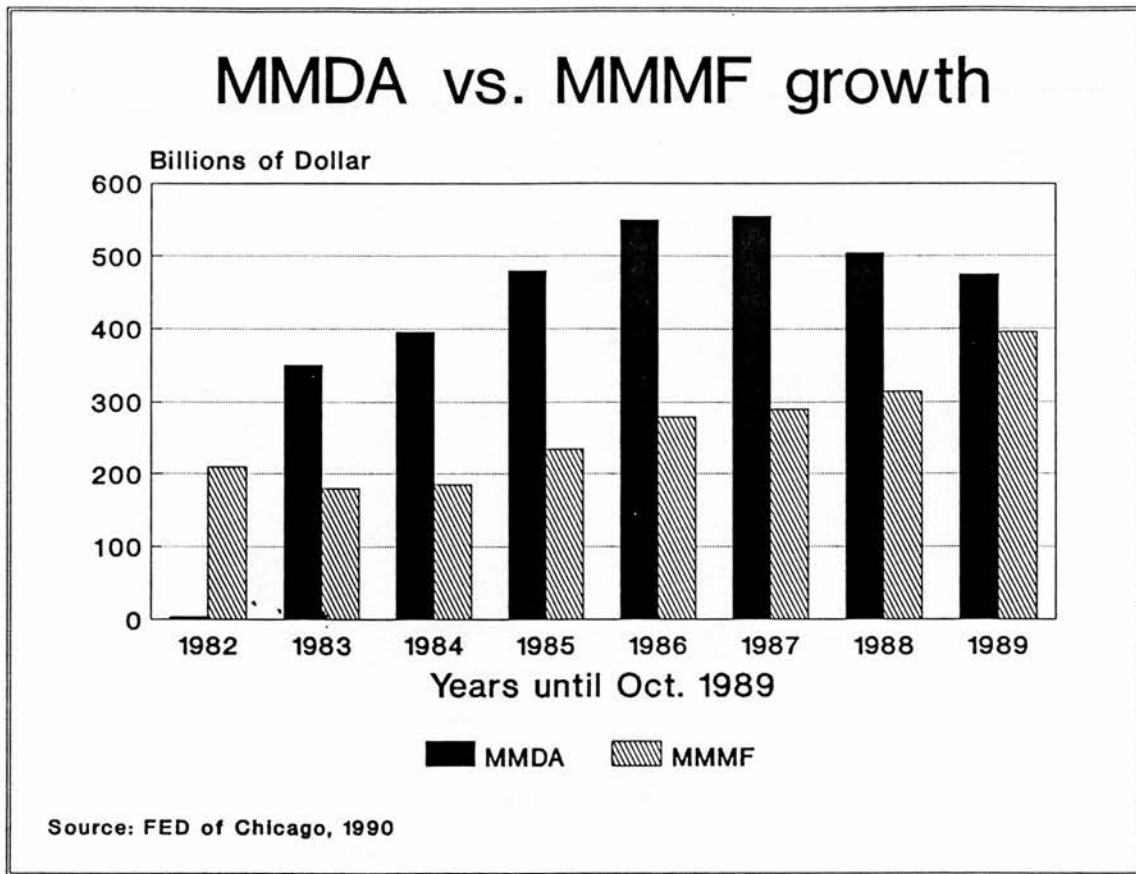
<sup>230</sup> DIDMCA of 1980, Title 2.

<sup>231</sup> see Kalogeras, G., 'Examining the Money Market Funds', in: The Bankers Magazine, vol.164, 1981, No.1, pp.66-72.

<sup>232</sup> A Super NOW account is eligible only to NOW customers, corporations are excluded. It carries unlimited transaction features, and does not have any interest rate restrictions. On the other hand, it carries a 12 percent reserve requirement.



Regulation Q specification.<sup>233</sup> The following diagram indicates the competitive thrust of thrift institutions triggered by the deregulations discussed above.



**Figure 15: MMDA vs. MMMF growth in the US**

Between 1982-83 money market accounts increased dramatically, a development that was substantially influenced by the competitive developments in the thrift industry as a consequence of the enhanced product powers.

<sup>233</sup> By 1983, however, any rate differentials that existed due to Regulation Q were removed. Regulation Q itself was entirely phased out by January 1, 1987.

Due to the attractive interest rates of these accounts, which at the time of their creation exceeded those of commercial banks' counterparts (in line with MMMFs and CMAs offered by financial conglomerates such as Merrill Lynch), banks rapidly lost deposits.<sup>234</sup> Thus, a strong substitution potential between thrifts' products and typical bank deposits was created by a change in the banking legislation in the US retail banking market in the first two years of the previous decade.

## **5.2            Analysis of Competitive Developments in both Countries**

Unlike their US equivalents, German Bausparkassen are more strictly regulated. Since the passage of the DIDMCA, US thrift institutions belong to the group of depository institutions, which basically have similar powers to commercial banks. Under the German Bausparkassengesetz (Building Societies Act), diversification strategies of Bausparkassen are only permitted into areas directly related to property finance, and into business areas that are clearly supportive to the Bauspar business.<sup>235</sup> This

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<sup>234</sup> see Seligman, B., Money Market Funds, New York, 1983, pp.69; also n.a., 'Money Funds: Raging Success', in: The Banker, vol.133, 1983, no.689, pp.7-8.

<sup>235</sup> §4 of the Bausparkassengesetz.

regulatory situation initially shifted the Bausparkassen' focus of attention on possible alterations in their product policy. Before launching these innovative products such as 'Dispo 2000', the Bausparkassen sector, between 1982-84, introduced various kinds of interest rate alternatives and bonus schemes in order to enhance the market attractiveness of Bauspar contracts. Wüstenrot's<sup>236</sup> long-term but high interest deposit alternative was just one example.<sup>237</sup>

The distribution of these products as well as ordinary Bauspar contracts was done via a mobile and highly flexible sales force. This channel carries the great advantage that new services like the Dispo 2000 can reach the market very quickly and effectively, because of motivated and hence aggressive sales people working on a commission base.

Similar to the distribution policy concerning life insurers and commercial banks in the German market, Bausparkassen and commercial banks were traditionally engaged in close cooperation agreements. Due to the fact that only Bausparkassen are legally entrusted with the

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<sup>236</sup> Wüstenrot is among the three largest Bausparkassen in Germany.

<sup>237</sup> Stracke, G. / Pohl, M., 'Financial Services in Deutschland (2): Marktstrategien der Bausparkassen', *ibid*, p.425.

right to offer Bauspar contracts<sup>238</sup>, banks that intended to participate in this business and to boost their own building and construction credit facilities, had to settle cooperation agreements. These agreements generally included that Bausparkassen satisfied their short and medium-term credit and refinancing needs by taking up their partners' credit facilities. In turn, banks got involved in the acquisition of new Bausparkassen customers who were directly sent to the cooperating Bausparkasse.<sup>239</sup> The negative economic developments at the beginning of the previous decade, however, and the inroads made into the retail banking market by large Bausparkassen, were the main reasons for the breakdown of many of these cooperation agreements by the mid-1980s.

In order to leave their competitive insularity, the largest Bausparkassen started to broaden their competitive platform by developing into 'Allfinance'-concerns with the Bauspar business as a core business area. This development led to conversions into a holding structure, the establishment of banking subsidiaries such as the Wüstenrot-Bank and the BHW-Bank, and cooperations with insurance companies.<sup>240</sup> Consequently, these institutions

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<sup>238</sup> §1 (1) Bausparkassengesetz.

<sup>239</sup> van Hooven, E., *ibid*, p.9.

<sup>240</sup> Storck, L., 'Das BHW als Finanzdienstleister: Wieviel aus einer Hand', in: Bank und Markt, July 1989, pp.13-21, here p.16; also Stracke, Guido / Pohl, Michael,

from 1987 onwards also offered investment certificates, savings and credit facilities, and insurance policies. This increase in competition is also indicated by an enormous growth in advertisement expenditure within the Bausparkassen sector. In 1987, this figure grew from a negligible amount, to DM 170 million, of which the top three organisations invested 60 percent.<sup>241</sup>

In the US, many large thrift institutions that intended to aggressively market their innovative products, along the same lines as the Bausparkassen did, had to broaden their capital base. This also led to numerous conversions from 'mutualised' organisation forms to public limited companies throughout the 1980s.<sup>242</sup>

### **5.3 Commercial Banks' Strategic Reactions in the US and Germany**

Pushed by the market-entry of Bausparkassen which provided increasingly similar products to typical bank deposits and hence eroded the distinction between the

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'Financial Services in Deutschland (2): Marktstrategien der Bausparkassen', *ibid*, p.429.

<sup>241</sup> Stracke, G. / Pohl, M., 'Financial Services in Deutschland (2): Marktstrategien der Bausparkassen', *ibid*, p.424.

<sup>242</sup> Dougall, H. / Gaumnitz, J., *ibid*, pp.68.

commercial banking and Bausparkassen industries, and US thrift institutions which offered almost the same product range as compared to commercial banks in the consumer credit and deposit business, commercial banks in both countries were forced to react.

In the German market, large commercial banks reacted by establishing de novo their own Bausparkasse subsidiary. In Spring 1987, Deutsche Bank was first in founding a Bausparkasse, the Deutsche Bank Bauspar AG.<sup>243</sup> Dresdner Bank, the second largest clearing bank pursued the same approach by establishing de novo its own subsidiary (Dresdner Bank Bausspar AG) in Spring 1988, whereas Commerzbank at the same time established a cooperation agreement with Leonberger Bausparkasse in line with its general cooperation strategy to team up, for example, with the Deutsche Beamtenversicherung in order to react to the market-entry of insurance companies.

Apart from the reason to react to the inroads undertaken by Bausparkassen, the market environment of the house building and property market in Germany also changed in a way that influenced the long-term consumer credit and property business of commercial banks. Determining factors

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<sup>243</sup> Schmitz-Morkramer, G., 'Bausparen in der Deutschen Bank', in: Der Langfristige Kredit, vol.6, 1987, pp.190-192, here p.190.

that had an impact on the decision-making process of banks to participate in the Bausparkassen system were:

- (1) only 40 percent of West German families at the end of 1986 were house owners. Bearing in mind that private homeownership is one of the main pillars of the nation's wealth creation, this meant a significant market potential to be satisfied in the second half of the 1980s.<sup>244</sup>
- (2) As of January 1, 1987, government created a tax incentive to save money for the purpose of house building that supported quick downpayments on house building loans, and also created a legally advantageous status for the self-utilisation of newly built housing facilities.<sup>245</sup>
- (3) The continuously growing influx of people from Eastern Europe into Germany - between 1988-90 more than two million - culminated in excess demand and accommodation shortages particularly in urban areas.<sup>246</sup>
- (4) In light of a deterioration of the social security

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<sup>244</sup> van Hooven, E., *ibid*, p.5.

<sup>245</sup> Modification of §10 (e) of the German Income Tax Act (Einkommensteuergesetz).

<sup>246</sup> Deutsche Bank Bauspar AG, Annual Report 1990, p.9.



system in Germany (see previous chapter), house ownership is one of the key investment areas for private households to ensure a safe and sound standard of living after retirement.<sup>247</sup>

In positioning the subsidiary in the market, banks regarded Bauspar contracts as an extension of their already existing product range. From a product policy perspective, this strategy ensured (a) that the classic savings deposit could be protected, and (b) the long-term mortgage business of the parent company was not cannibalised. In addition, the Deutsche Bank Bauspar AG, for instance, introduced a very attractive rate system - similar to the rate alternatives of incumbent Bausparkassen between 1982-84 - with in total seven different alternatives of Bauspar contracts.<sup>248</sup> In 1989 and 1990, the Bausparkasse subsidiaries of the large clearers reached the break-even zone.<sup>249</sup>

With regard to cooperative banks, these institutions for almost 30 years had a Bausparkasse - the Bausparkasse

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<sup>247</sup> Wielens, H., Member of the Board of Directors of Deutsche Bank Bauspar AG, Flexibilität und Zuverlässigkeit - Deutsche Bank Bausparen, Press conference speech on 13 March 1987, pp.1-8, here p.4.

<sup>248</sup> Wielens, H., *ibid*, pp.7-8.

<sup>249</sup> Annual Reports of Deutsche Bank, Dresdner Bank of 1990.



Schwäbisch Hall (BSH) - as a dedicated partner operating within the cooperative banks network. Roughly at the same time, in the second half of 1986, a more intensified cooperation was decided to fight off competition from independent Bausparkassen and large commercial banks.<sup>250</sup>

The distribution of Bauspar contracts was initially done solely via the branch network of the parent company similar to insurance products. This strategy guaranteed nationwide coverage of the new products. However, the German Federal Supervisory Office mandated the creation of an independent sales force<sup>251</sup> in order to achieve competitive equality to independent Bausparkassen.

By the end of the previous decade, as a result of the strategic response, the market share of large commercial banks in the house building credit business increased to 7.46 percent, from 4.8 percent in 1985. Independent Bausparkassen, in turn, lost market share. They went down from 17.27 percent in 1985 to 13.11 percent in 1990. The following table summarises this change.

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<sup>250</sup> see Kleiner, H., 'Bausparen als Schlüsselprodukt am Finanzdienstleistungsmarkt', in: Bankinformation, 08/1987, pp.27-31.

<sup>251</sup> Schmitz-Morkramer, G., 'Deutsche Bank Bausparkasse auf Erfolgskurs', *ibid*, p.280.

**Table 11: The Housebuilding Credit Market 1985-90**

	<u>Assets in Bln DM</u>		<u>Market Share in %</u>	
	1985	1990	1985	1990
large CB	38.34	70.06	4.8	7.46
Savings Banks	185.01	237.14	23.18	25.25
Coop. Banks	89.28	111.09	11.18	11.82
Bausparkassen	145.88	132.52	17.27	13.11

Columns do not add up to 100 because other types of banks have deliberately been left aside for the purpose of simplicity.

**Source:** German Bundesbank, Monthly Report, Statistics Supplement, Febr. 1991

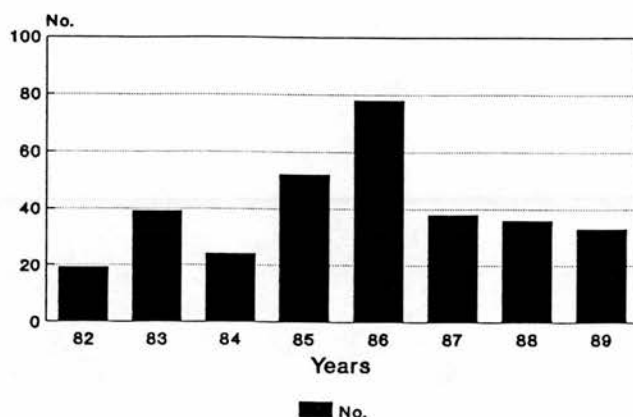
In the US market commercial banks reacted quickly to growing competition from the thrift industry. They immediately began to offer money market deposit accounts which led to the rapid rise of this product until it reached its peak in 1986/87, with roughly \$550 billion of deposits (see figure 15), and also adjusted interest rates of their savings accounts up to the level of competing products. This was also accompanied by the phasing-out of the artificial rate differential between thrifts and commercial banks' deposit products.

Unlike the large independent Bausparkassen which run nationwide branch networks, US thrift institutions, due to interstate banking restrictions (see section 2.3.2), were only competitors in local banking markets. In these local markets they were characterised by community strength, customer loyalty, and established distribution links. The

expansion of their product range was a great opportunity to benefit from these market relations and to increase the market share in their local markets. On an aggregated nationwide basis, this would have meant severe competitive threats to large commercial banks. However, due to the facts that thrifts operated only locally, that they did not have any reserved 'territory' such as the Bauspar market in Germany because of explicit regulations, and that their product range was similar to commercial banks', large commercial banks did not regard them as a significant competitive threat. Moreover, by pushing their own products and services (and new ones such as MMDAs), they could easily counterbalance the inroads made by thrift institutions.

In contrast to the strategic reply of German commercial banks (de novo establishments), the US equivalents predominantly pursued the M & A approach as indicated by the following diagram.

## Acquisitions between 1982-89



Source: Bank Management, Febr.1990

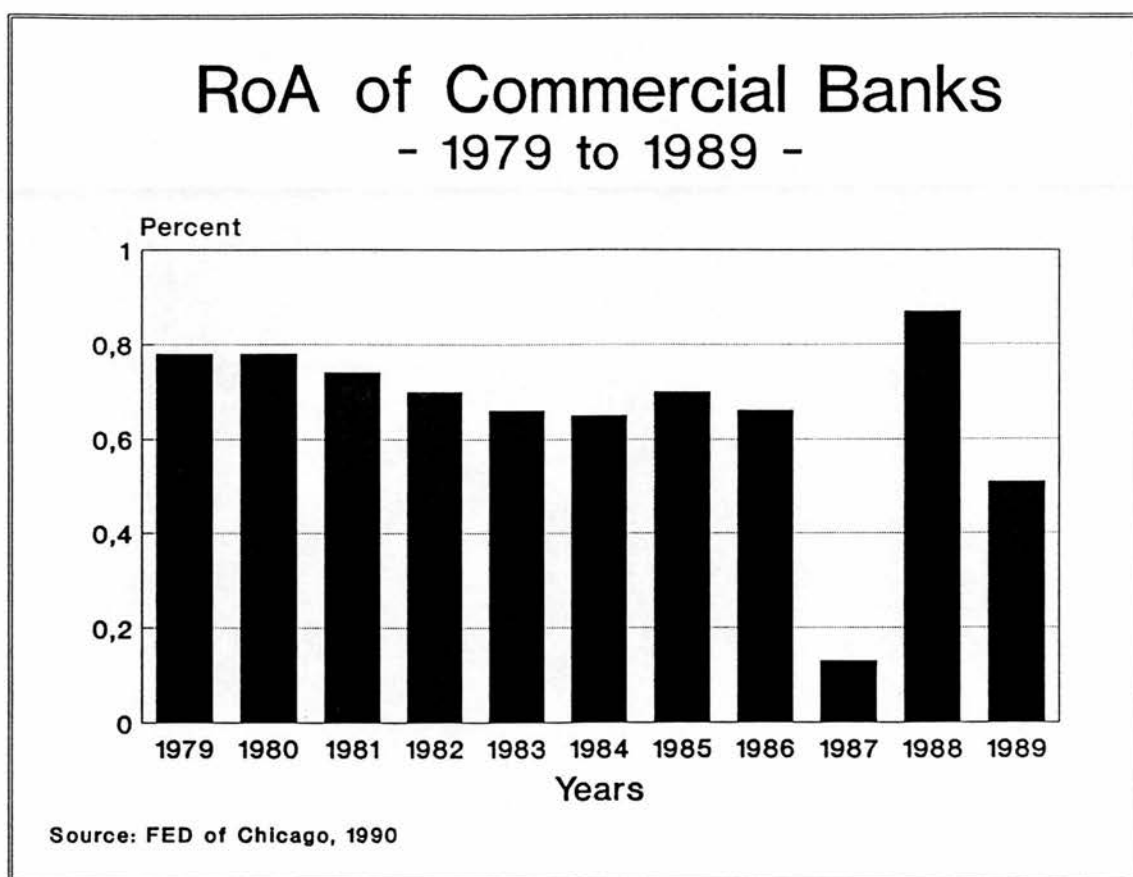
**Figure 16: US Bank Acquisitions 1982-89**

This development was largely influenced and triggered by several environmental factors inherent in the US banking market:

- (1) Most large US commercial banks showed sluggish growth, declining profitability ratios, and declining asset quality partly due to LDC-debt problems, resulting in huge write-offs and loss provisions. As a consequence, they showed signs of undercapitalisation which made de novo expansion extremely expensive.<sup>252</sup> Diagram 17 illustrates the RoA

<sup>252</sup>

see Rose, P.S., 'Profiles of US Merging Banks', in: Bank Mergers: Current Issues and Perspectives, ed. by Gup, B.E., Boston, 1989, p.13; also McLaughlin, M. / Wolfson, M., 'The Profitability of Insured Commercial Banks in 1987', in: Federal Reserve Bulletin, 'July



**Figure 17: RoA of US Commercial Banks 1979-88**

- (2) The beginning of the interstate banking deregulation (Maine, 1978, and subsequently the New England regional Compact) process with the creation of

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1988, pp.404,410,411; Wallich, H.C., The International Debt Situation: An American View, Speech given to the Verein für Sozialpolitik, Frankfurt, 8 Febr. 1985; also Nussbaum, P., 'Banking 1988: A Market View', in: Economic Perspectives, July/Aug. 1989, p.7.

reciprocity laws and regional compacts offered opportunities to acquire banks and thrifts, and hence retail deposits and credit facilities across state borders.<sup>253</sup>

- (3) Legislative steps undertaken by the Congress, namely the Garn-St.Germain Act of 1982 and the FIRREA (Financial Institutions Reform, Recovery, and Enforcement Act) of 1989 to loosen the emergency rules governing the acquisition of failing bank and thrift organisations, created attractive takeover opportunities for large commercial banks.

As a result of the above factors, money centre banks such as Citibank purchased a number of S & L institutions but only in selected local markets.<sup>254</sup> It was often the only possibility to geographically diversify the loan portfolio, the deposit base, and to gain access to local retail markets. In contrast to German banks which predominantly started from scratch, US banks were faced

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<sup>253</sup> Calem, P., *ibid*, pp.4; also Clair, R.T. / Tucker, P.K., *ibid*, pp.12-13; also Clair, R.T. / Tucker, P.K. / Siems, T.F., 'Removing the Remaining Barriers to Interstate Banking', in: The Bankers Magazine, Jan/Feb. 1991, pp.11-17; Goudreau, R.A. / Wall, L.D., 'Southeastern Interstate Banking Consolidation: 1984-89', in: Economic Review, FED of Atlanta, Nov/Dec. 1990, pp.40.

<sup>254</sup> Layne, R., 'Citibank plans Network of Niche Branches', in: American Banker, 31 Oct. 1990, p.8.



with the task of integration. Commercial banks such as BancOne<sup>255</sup>, NCNB, and Citibank, applied a transition strategy to convert acquired S & L institutions into a community bank by adding typical commercial bank products and services (ie revolving credit or commercial loans) to the traditional consumer mortgages and savings products. Appendix 6 presents a transition model frequently applied by Citibank. William J Heron, Citi's Executive of the US Consumer Banking Group, described this strategy as follows:

"Citi has built this branch network through S & L acquisitions at an initial low cost with a lot of follow-up work. We have tended to buy relatively small, unhealthy institutions and spent quite a few years fixing them up."<sup>256</sup>

#### **5.4 Strategic Reactions in terms of IT**

As discussed already in the previous section, German commercial banks decided to either fight off competing Bausparkassen by creating de novo their own Bausparkasse subsidiary, as in the case of Deutsche or Dresdner Bank, or to implement close cooperations as Commerzbank and the cooperatives did. In the US, the main business strategy

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<sup>255</sup> Svare, J.C., 'The BancOne Experience', in: Bank Management, Nov. 1990, pp.19-24.

<sup>256</sup> Heron, W.J., in: Citicorp's Strategies for the Nineties, New York, 1990, p.16.

applied was the acquisition and integration of S & L institutions. What remains to be analyzed on the following pages is whether these business strategies were accompanied by a significant change in the banks' IT strategy ?

Similar to the cooperations between life insurers and German commercial banks, as discussed in the previous chapter, the cooperation agreements in the case of Commerzbank and Leonberger Bausparkasse, or the cooperative banks, via Fiducia as their central DP organisation, with Bausparkasse Schwäbisch Hall (BSH), require a link-up between two independent IT architectures. The problem zones and areas for immediate IT activities related to this issue as identified in section 4.4 (compare organisational IT model, figure 11) also apply in this case. Hence it is not necessary to discuss them again in this chapter, because apart from different products - insurance policies on one side, and Bauspar contracts on the other - there is no difference. In addition, both types of products are distributed in the same way so that almost identical requirements on the central and local IT layers are existent.

The general IT strategy in place in the mid-1980s, in the case of Fiducia, before the market-entry of Bausparkassen occurred, was the evolution of the



FIDIS/GENOS database system into a relational database information system according to the three-phased plan already mentioned in section 4.4. In response to the market-entry of Bausparkassen, this strategy had to be changed. IT investments and application developments that were planned two years later had to be made earlier.

In order to gain access to BSH's customer and policy data, Fiducia developed a new database system called Hallis. This system, essentially a restricted shadow system of BSH's own database, provides individual customer information about the number of Bauspar contracts, allocated loans, maturity dates, and the payment history.<sup>257</sup> In tandem with another database system supporting the property finance business called Immoplan, and the required match code and data extraction programs, an online dialogue application was also developed and integrated into the GENOS shell as an additional online service for individual cooperative banks. These IT activities were completed by the end of 1987 and went on stream in January 1988. The overall cost related to these activities amounted to the following:

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<sup>257</sup> Schwenk, D., 'Hallis Informationsservice der Bausparkasse Schwäbisch Hall', in: Bankinformation, 09/1990, pp.20-23, here p.21.

- cost of additional relational database software licenses: DM 160,000
- programming expenses and related project cost to develop Hallis, Immoplan, and the attached dialogue systems: DM 637,000
- additional expenditure for communication and network software: DM 900,000

In line with the completion of these application development, design, and purchase activities of IT kit, came the completion of the computer-to-computer communication line that enabled immediate data transfer via file transfer between Fiducia and BSH (also see Ch.4).

As another important component of the Concept of Integrated Financial Service Consulting Stations (IFSCS), that was introduced in section 4.4. in the previous chapter, and the related process of financial engineering, the provision of Bauspar contracts and financial consulting in the business area of house and property finance, had to be integrated into the already existing service stations. This decision required the availability of decentralised computer power and was certainly a determining factor in the purchase of additional personal computers and terminals in 1987/88. Figure 13, section

4.4, illustrates the increase of personal computers and terminals during that interval. The total investment cost related to these hardware components amounted to 3.5 million DM. However, it would be tantamount to pure guessing to work out the precise percentage figure of the cost directly attributable to the market-entry of Bausparkassen, in relation to the planned investment expenditure to realise the IFSCS concept.

In the case of founding a subsidiary from scratch, similar large IT investments had to be made. First of all, the entire subsidiary and its branches had to be equipped with basic IT kit such as cabling facilities, communication links, terminals, personal computers, printers and the like. In addition, the diversification into the Bauspar business either meant extremely complex and relatively long-lasting software development processes, or the purchase of an entire Bauspar contract, customer, and administrative application system from an independent Bausparkasse and its subsequent modifications according to the new environment. In light of the urge of the decision, both Deutsche Bank and Dresdner Bank chose the second alternative. Both companies bought the Bauspar application system from the Landesbausparkasse Kiel. The cost attributable to this purchase amounted to roughly DM 6 million.

Apart from the mere purchase of IT kit and the application package, two additional IT activities had to be performed. Firstly, more than 800 individual programs of the initial application package were changed and redesigned due to different key systems, Bauspar contract alternatives, and filing attributes between the Landesbausparkasse Kiel and the purchasing commercial bank. Large programming and maintenance costs were thus incurred on top of the purchase price. Secondly, the new subsidiary also required its own mainframe computer to run the application, or a sufficient amount of computing time, power, and storage capacity provided by a mainframe in the parent's DP centre. Again both commercial banks went for the second alternative, which meant an additional cost block charged for the utilisation of the mainframe computer. Roughly DM 4 million were charged by the parent company for the provision of this IT service. The aggregated sum of these individual cost items and IT activities directly related to the diversification into the Bauspar business, represented a significant fraction of the overall IT budget devoted to retail banking activities. With regard to the cost of these IT activities, the aggregated sum within Deutsche Bank and Dresdner Bank amounted to twenty-five percent of the IT budget devoted to the retail banking function. The cost of Fiducia and Commerzbank, which realised the cooperation approach, were somewhat lower but still above the twenty

percent limit.

In the US, the market-entry of thrifts did not require any significant strategic reaction in terms of IT.<sup>258</sup> As found out in the previous section, large commercial banks acquired mostly failing S & L institutions, triggered by the thrust to geographically diversify their loan and deposit portfolio by extending their network of retail banking outlets. They did not regard the market-entry of thrift institutions as an important competitive threat.

The only interesting aspect in terms of IT concerning the integration of acquired institutions is the merge of the acquired IT platforms and infrastructure with the bank's existing IT platform. However, the motif behind the consolidation of IT platforms, networks, and DP centres is cost control and economies of scale. Banks can eliminate redundant circuits, personnel, application programs, or DP centres, and thus streamline their operations.<sup>259</sup> The IT

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<sup>258</sup> Apart from cyclic IT expenditure in calculational automation and various related PC-based solutions to smoothen mortgage and other long-term lending processes, that represented only minor IT cost, US commercial banks did not invest in this business segment in the 1980s.  
see Lendis, K., 'Technology Conquers the Mortgage Mill' in: Bankers Monthly, July 1990, pp.33-36.

<sup>259</sup> see Eckerson, W., 'Bank Mergers Test Mettle of Network and IS Staffs', in: Network World, vol.29, iss.29, 22 July 1991, pp.2,62; also Kay, S., 'Citicorp Blends Technologies as Means to Corporate Ends', in: Computerworld, vol.24, iss.28, 9 July 1990, p.88; also Burger, K., 'BancOne Corp: Thinking Big in Texas', in:

activities related to the integration process can therefore not be classified as strategic IT activities to react to the market-entry of a nonbank competitor.

The problems which generally arise in this context, namely the incompatibility of software applications, key systems, or hardware components opens up a very interesting aspect to be investigated. However, the research thrust of this dissertation does not allow to look at this issue any further. Nevertheless, it represents a good starting point for other investigations.

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Bank systems & Technology, vol.27, iss.4, Apr. 1990, pp.38-42; also Craft, J.D., 'Retail Banking in the 1990s: Nonbanks try to make you a Nonentity', in: Journal of Bank Accounting & Auditing, Winter 1991, pp.37-41.



Thrift institutions in both countries are traditional providers of long-term property finance and mortgage lending. Until the 1980s they were competitors to commercial banks only in this long-term credit segment. Due to significant changes in the banking legislation (DIDMCA of 1980, Garn-St.Germain Act of 1982) and the resulting product range liberalisation, US thrift organisations were permitted to leave their competitive insularity by providing highly attractive sight deposits, various kinds of consumer and business loans, credit cards, and checking accounts. In addition, until 1983 they benefitted from an advantageous interest rate differential over commercial banks because of Regulation Q. These products implied a strong substitution potential to typical bank deposits because of their attractiveness and similarity. In Germany, the Bausparkassen operate in a legally protected market niche (§1 (1) Bausparkassen-Gesetz, (Building Societies Act), and also enjoy advantageous government support for their products. However, a generally deteriorating market environment due to decreasing savings ratios, rising unemployment, and changing structures of the private house building market in the first years of the 1980s, necessitated product policy alterations to ensure long-term survival. The financial innovation of Bauspar contracts which basically

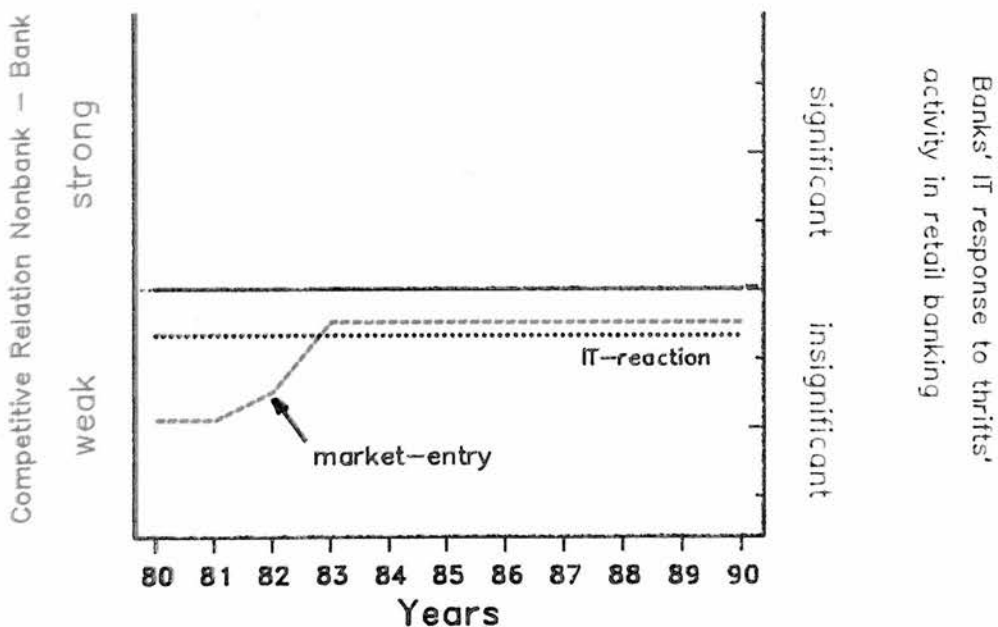
combined the original credit element with a high yielding deposit account, represented substitute products to in general low-yielding savings deposits (ie 2.5 percent) of commercial banks.

In spite of this competitive substitution potential and hence market environment, US commercial banks were in a relatively secure market position to respond to the market-entry, that happened on a broad scale in 1982 (the passage of the DIDMCA in 1980 led to an initial increase in competition in 1981). The introduction of money market accounts, and interest rate adjustments of their deposit accounts up to the level of competing products (supported by the phasing-out of regulatory incurred rate differentials in 1983), were sufficient movements to react to the inroads made into the retail banking market. In addition, the existing interstate banking regulations qualified thrifts only as very local competitors. Thus, US commercial banks did not regard thrift institutions as severe competitive threats that would require a significant change in their business and IT strategy. Triggered by favourable geographical deregulations, emergency legislation to acquire failing thrift institutions, and their own financial situation, they took over various thrifts in selected regional banking markets, converted them into community bank branch outlets, and finally integrated them. From an IT strategic point of



view, these steps only required system integration activities under cost control and economies of scale considerations. Apart from routine IT investments to enhance long-term mortgage lending processes, and to keep up with technology changes, a change in the IT strategy was not observable. The diagram below illustrates the 'negative correlation' between the market-entry of thrifts into the US retail banking market, and the change in the IT strategy.

### Banks' IT reaction to the market-entry of thrifts into the US retail banking market



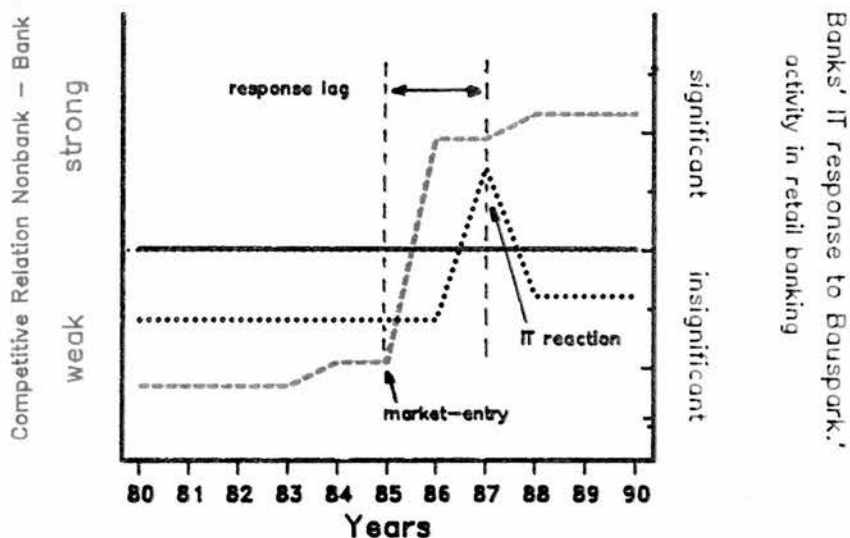
**Figure 18: Banks' IT Reaction to the Market-Entry of Thrifts into the US Retail Banking Market**

In the German market, commercial banks reacted differently to the market-entry of Bausparkassen. In response to the market-entry, that occurred in the first half of 1985 with the market launch of innovative products such as Dispo 2000, and the subsequent acquisition of bank subsidiaries through large Bausparkassen paired with their conversion in holding structures (in 1987), German commercial banks founded their own Bausparkasse subsidiary, as for instance Deutsche Bank in 1987, or established close cooperations with incumbent Bausparkassen, such as the network of cooperative banks and Commerzbank did. In addition, favourable profit prospects in the recovering German house building market, a constantly deteriorating social security system, the growing influx of people from Eastern Europe, and tax incentives supported this decision. Through an aggressive marketing and distribution policy (via the parent's branch network) between 1987-89, commercial banks were able to increase their market share in the house building credit market by 64 percent on the back of independent Bausparkassen' market share.

Similar to the strategic response to the market-entry of life insurers, such an aggressive strategy required significant IT investments. Fiducia's reaction in the second half of 1986, which was again first among the German banks, and Deutsche Bank's answer half a year

later, represented the point in time of a major change in strategy in the German commercial banking industry. The IT activities required to respond to the market-entry of this type of nonbank competitor encompassed substantial programming and maintenance activities, the purchase of basic database and network software packages, the design (as in Fiducia's case) of a new Bauspar application system, or the purchase and modification of an already existing application package (as in the case of Deutsche and Dresdner bank), and significant investment in hardware and decentralised computer power (personal computers) to realise the IFSCS concept. The total cost to respond to the market-entry amounted to a significant fraction (between 20-25 percent) of the overall budget devoted to retail banking in that year. The following diagram attempts to graphically illustrate the 'positive correlation' between the market-entry of Bausparkassen and the strategic response in terms of IT.

## Banks' IT reaction to the market-entry of Bausparkassen into the German retail banking market



**Figure 19: Banks' IT Reaction to the Market-Entry of  
Bausparkassen into the German Retail Banking  
Market**

## **6. The Market-Entry of Retail Organisations**

### **6.1 Retailers' Financial Services as Substitution Threats to Banking Credit Facilities**

In contrast to the previous two types of nonbank competitors and their respective services which mainly represented competition to commercial banks in the deposit segment of the retail banking services market, retailers<sup>260</sup> in turn, are primarily engaged in the credit business and hence represent a competitive threat of substitution in the credit segment of the retail banking services market.

According to German banking law, a retailer - as a typical nonbank institution - that is engaged in the credit business, needs a full banking licence.<sup>261</sup> In the US, financing and credit activities of nonbanks are not constrained because they are not subsumed under the banking legislation. This situation limits the range of business activities for German retailers - as opposed to US retailers - to short-term merchandise finance and the credit card business.<sup>262</sup>

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<sup>260</sup> compare Stammer, K., *ibid*, sect. 3.2.

<sup>261</sup> §1, sect.1 of KWG.

<sup>262</sup> Both types of business economically represent the granting of credit, but legally do not qualify as a lending activity. Under German law these activities are regarded as means to officially postpone the actual payment of the purchase price at the day of purchase.

The granting of credit through retailers and other nonbanks such as oil companies or car rental organisations, is generally performed as a sales promotion vehicle to support sales of the main merchandise. Two kinds of credit are commonly used depending on the target group of the retailer. These are supplier credit, granted to small companies, and consumer credit provided to individuals. Due to the focus of this dissertation on the consumer banking business, the following sections will solely deal with consumer credit.

The main medium of credit financing to private households is the credit card. It is applied according to the two-party credit card system as described in section 3.3. Apart from benefits such as building up customer databases, and cross selling through direct marketing, the issue of a retailer credit card enables the retailer to build a 'privileged relationship'<sup>263</sup> with its customers. The rationale behind this concept is to sustain customer loyalty, and to pre-empt a higher proportion of the individual's purchasing power to the retailer whose card

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Reischauer, F. / Kleinhans, J., Kreditwesengesetz, Berlin, 1985, Comment on §1 of KWG.

<sup>263</sup> Worthington, S., 'Retailer Credit Cards: A Competitive Threat', in: International Journal of Bank Marketing, 12/1990, pp.3-9, here p.5.



they hold.<sup>264</sup>

With regard to the significance of retailer credit cards as instruments in the consumer finance business, that embody a threat of substitution to banks' credit facilities, the last decade witnessed substantial differences in the US and German markets. In Germany, in contrast to the US, where commercial banks diversified much later into the short-term consumer banking business, commercial banks were traditionally engaged in private banking. Therefore, competition in consumer credit facilities did not intensify to the same extent as it did in the United States. In addition, the readiness of most US households to temporarily carry large amounts of debt as compared to Germany where cash payment is still prevailing, facilitated the introduction of retailer credit cards to postpone the payment of the purchase price.<sup>265</sup>

The volume of direct merchandise financing facilities outstanding, the 'notes and accounts payable' in the US

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<sup>264</sup> Burke, T., Retailer Plastic - Own Label Credit Cards - A new Competitive Weapon in the High Street, 1989, unpublished Working Paper No. 38, The Polytechnic of Central London, London, 1989.

<sup>265</sup> Lyons, T.L., 'Retailers in Financial Services', in: The Bankers Magazine, vol.168, 1985, no.1, pp.17-21, here p.18; also Cooper, K. / Fraser, D., *ibid*, p.199.

increased from \$ 514.4 bln in 1980, to \$ 668.4 bln in 1986, the year with the most recent data available.<sup>266</sup> In Germany, at the same time, it reached a total of roughly DM 300 bln.

Regardless of the kind of short-term credit financing facility, supplier credit or consumer credit, the credit-taker is in the same position as if he had taken a bank credit. Hence, a substitution link between both kinds of credit facilities is recognisable. However, this link is only valid under the assumption that the credit-takers' creditworthiness in both cases is high enough to satisfy the credit standards of a bank. It is commonly known that retailers do not examine the creditworthiness of a customer to the same extent as bankers must do due to the risk of default.<sup>267</sup> The probability, therefore, that an individual with a low credit rating will obtain consumer credit from a retailer via its credit card, despite a bank credit was denied, is relatively high.<sup>268</sup>

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<sup>266</sup> This account held a balance of \$ 547.1 bln in 1981, \$ 550.7 bln in 1982, \$ 595.7 bln in 1983, \$ 647.8 bln in 1984, and \$ 682.7 bln in 1985.

Board of Governors of the Federal Reserve System, 'Nonfinancial Corporations', in: Federal Reserve Bulletin, vol.74, iss.3, Mar. 1988, S.A., Tab.1.49.

<sup>267</sup> Retailers do also not have the same power to force customers to open their books as bankers have.

<sup>268</sup> compare Hess, J., 'Wo die Banken nicht mitziehen, springt der Großhandel ein', in: Handelsblatt, 10 May 1982, p.19.



As a consequence of this situation, the volume of consumer receivables outstanding only partially qualifies as substitution potential to bank credit facilities. In addition, it must be noted that many nonbanks that use short-term consumer financing for the purpose of sales promotion, still do require banking credit to satisfy their refinancing needs, except for large ones which can use the commercial paper market as a refinancing source. That reduces the implications of consumer credit business lost to these nonbanks for commercial banks. Due to a lack of information about the financial behaviour pattern of retail organisations, it is impossible to quantify the extent of these implications on the short-term credit business of commercial banks.

As a result, it can be pinpointed that the financial services of retail organisations, in the form of short-term consumer finance, represent a threat of substitution to bank credit facilities. But due to the on average low credit rating of debtors, these facilities in many cases do not qualify as competitive potential to comparable bank credits. Furthermore, banks still remain the prime refinancing source of many retail organisations. Hence, the unconstrained recognition of a substitution link between both types of credit facilities must be limited because of the above findings.

## 6.2 Development of Competition through the Market- Entry of Retailers in the US

Frequently, large retail organisations and manufacturing companies that got involved in financial services activities, established so-called captive finance companies or nonbank bank subsidiaries to handle these activities.<sup>269</sup> The establishment of captive finance companies by for instance large car manufacturers such as GM or Chrysler, to support car sales via car loans, leasing arrangements <sup>270</sup>, and other short and medium-term financing facilities, is thereby only concentrated on the credit business due to the legal requirements specified in the BHCA and Glass-Steagall Act<sup>271</sup>, in order to avoid being supervised as a commercial bank. Whereas nonbank bank subsidiaries, in contrast, are permitted to offer a whole range of financial services including for instance consumer credit, various kinds of deposits, and even

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<sup>269</sup> compare section 3.4.

<sup>270</sup> In the second half of the 1980s triggered by the process of securitisation, these organisations also diversified into the asset-backed securities market by transferring the concept of CMOs (Collateralized Mortgage Obligations) onto auto loan receivables. Lerbinger, P., 'Asset-backed Securities am US Kapitalmarkt', in: Die Bank, 6/1987, pp.310-315, here p.310.

<sup>271</sup> According to these acts a commercial bank is involved in both, the deposit business and commercial lending activities.

securities or insurance products.<sup>272</sup> As a consequence, the competitive relationship between these nonbank banks and commercial banks in terms of substitution potential must be regarded as very intense, because they are able to almost completely substitute the financial intermediation of banks. In addition, unlike captive finance companies which need banks to satisfy their refinancing needs, due to a non-existing deposit business, these nonbank banks are entirely 'self-sufficient'.

The typical example of a retailer diversifying into the retail banking services market by applying the nonbank bank approach, is Sears Roebuck & Company (Sears). Sears' idea is to satisfy consumers financial needs, which change as they pass through various stages of their life cycle, and to keep these consumers within Sears' financial network. Based on an in-depth knowledge of the purchasing behaviour and financial situation of each customer (because of large customer databases), Sears is in the position to tailor-make financial packages for each individual customer. Furthermore, due to continuous updates of the customer information files, customers can be instantly targeted in case of new financial services.<sup>273</sup>

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<sup>272</sup> Ellis, J.A. / e.a., 'Who's Getting the Bucks - And Who's Not ?', in: Banking World, 10 Febr. 1986, p.67.

<sup>273</sup> Stracke, G. / Pohl, M., 'Aktivitäten von Waren- und Versandhäusern im Finanzdienstleistungsmarkt Europas', in: Die Bank, 2/1987, pp.94-97, here p.95.

The SearsCharge and Discover Cards<sup>274</sup> play a key role in Sear's diversification strategy into the retail banking market. In 1982, Sears bought the brokerhouse Dean Witter Reynolds (compare section 3.4), and used that business in tandem with Coldwell Banker, its nonbank bank subsidiary, to launch SearsCharge and to implement in-store financial centres in each large Sears department store. These centres were staffed with professional bankers who offered commonly used credit and deposit services, financial products of well-established financial institutions,<sup>275</sup> but also stocks, shares, and real estate services.<sup>276</sup>

This strategy did not change until 1989, when Sears recognized that 'selling socks and stocks did not mix'<sup>277</sup> because of fundamental differences in the customer's perceived ambience of purchasing relatively complex securities or real estate services. However, despite that setback in the general financial strategy, the range of financial services offered, belonging to the retail banking services market, is still large enough to be a real threat of substitution to commercial banks.

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<sup>274</sup> In the USA, retailer cards dwarf (by now) bank cards in numbers issued; Sears alone issued 61 million cards and these account for 65 percentum of Sears' sales. Worthington, S., 'Retailer Credit...', *ibid*, p.6.

<sup>275</sup> Stracke, G. / Pohl, M., 'Aktivitäten...', *ibid*, p.94.

<sup>276</sup> Worthington, S., 'Retailer...', *ibid*, p.6.

<sup>277</sup> *ibid*.

In January 1986, Sears intensified competition in consumer credit even further by introducing the Discover Card, which rivals usual bank credit cards in that this card<sup>278</sup> is applicable in many shops and locations besides Sears' own department stores.<sup>279</sup> It was targeted at customers who either held a SearsCharge card already, and other credit card holders who paid annual fees without any incentives by the issuing banks for increased card usage. The Discover Card had several advantages over other credit cards such as VISA or MasterCard:

- the absence of any annual fee
- lower service charges (1-1.5% below bank card charges)
- incentives for frequent usage such as bonus points or travel awards
- Sears well-known brand name<sup>280</sup>

As a result, the Discover Card quickly reached its break-even point and in 1989 achieved a profit of well

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<sup>278</sup> For a discussion of the advantages of credit cards to retailers please also see Kirkman, P., Electronic Funds Transfer Systems, New York, 1987, pp.47-51.

<sup>279</sup> Lerner, F.H., 'Nonbank Banks: The Credit Card War', in: Bankers Monthly, 4/1990, pp.34-35, here p.34; also Worthington, S., 'Credit Cards in the United Kingdom - Where the Power lies in the Battle between the Banks and the Retailers', in: Journal of Marketing Management, 1988, vol.4, no.1, pp.61-70.

<sup>280</sup> Worthington, S., 'Retailers...', *ibid*, p.6.

over \$60 million (in 1988 a profit of \$19 million) and of \$116.7 million in 1990.<sup>281</sup> Both cards represent the backbone of the income generated by Sears Merchandise Group during the same period. These earnings are clearly money that could have been made - at least partially - by commercial banks issuing credit cards, or other financial conglomerates such as American Express.

Very recently Sears launched another financial service called 'Prime Option' which essentially is a VISA card without any fees. This strategic movement could siphon off revenues from VISA members through intra-brand competition, and hence could deteriorate commercial banks' credit card business even further. However, VISA's legal response was an antitrust challenge<sup>282</sup> which has yet to be settled.

To summarize the main results, retailers' market-entry into the retail banking services market, primarily via nonbank bank subsidiaries, represents a successful and almost entire substitution of the financial intermediation of commercial banks in that market. This is done without any significant usage of bank credit facilities for

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<sup>281</sup> Lucas, P., 'Sears keeps its Prime Option open', in: Credit Card Management, 04/1991, pp.62-68, here p.64; also Lerner, F.H., *ibid*, p.34.

<sup>282</sup> Lucas, P., *ibid*, p.66.



refinancing purposes. Furthermore, the credit card segment of the retail banking services market faces stepped-up competition from companies like Sears, which are able to coordinate both the card issuing element and the consumer acquisition activities in the credit card system. This polarisation trend<sup>283</sup> weakens the ability of bank cards to compete with nonbank card products, because in general a commercial bank only controls one element of the card system and requires cooperation in the other.<sup>284</sup> In addition, retailers such as Sears are in an increasingly strong position in the bank card system through control of the point-of-sale via POS-terminals and similar information technologies.<sup>285</sup>

### 6.3 Competitive Developments in the German market

In Germany, retailers discovered the financial services segment in the second half of 1984.<sup>286</sup> Successful retail organisations such as Quelle - which took over Noris Bank -<sup>287</sup>, Karstadt AG, or Kaufhof AG, started to establish

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<sup>283</sup> Dunn, P.T. / Poe, D.A., 'Preserving the Integrity of the Bank Card', in: Journal of Retail Banking, 08/1990, pp.35-44, here p.42.

<sup>284</sup> compare Appendix 2.

<sup>285</sup> *ibid*, p.41.

<sup>286</sup> Hirn, W. / Poweleit, M., 'Mit Sicherheit erfolglos', in: Manager Magazin, 04/1988, pp.228-238, here p.231.

<sup>287</sup> *ibid*, p.238.

finance facilities by creating their own subsidiaries, or via cooperation agreements with well-established banks and insurance companies.

According to German banking law, a nonbank bank subsidiary that is engaged in the credit business, legally and structurally independent from the parent company, not primarily concentrated on the sales promotion of the parent's merchandise, and has reached a certain size<sup>288</sup>, requires a full banking license.

Similar to the US, the establishment of these subsidiaries was mainly focused on the following activities:

- diversifying into the lucrative market of short-term consumer credit
- stabilizing and intensifying customer relationships via customer accounts
- providing attractive credit facilities as a means of sales promotion

In pursuing these activities, retailers realized the competitive advantage over commercial banks to be able to

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<sup>288</sup> compare Szagunn, V. / Wohlschließ, K., Gesetz über das Kreditwesen in der Fassung vom 11.7.1985, Comments, 4th. edn., Stuttgart, 1986, Tz.30.



satisfy a financial need at the time of its creation.<sup>289</sup> In addition, retail shops in Germany stay open on average more than 13 hours (incl. Saturdays) longer than their bank competitors.

However, unlike their US equivalent Sears Roebuck, German retailers did not offer the full range of credit and deposit products. They mostly constrained their product range to providing credit as a sales promotion vehicle. A good example to illustrate this strategy is Quelle, Germany's largest mail order organisation, and also among the largest department store chains. Its banking subsidiary 'Quelle Bank' only offers two products, a mail order banking account called Telefon-Plus-Account<sup>290</sup> with a minimum deposit of DM 2000, no overdraft option, and attractive interest rates (about two percentum over the going market rate); and secondly an assortment of instalment credit facilities ranging from DM 2000 to DM 70,000 with fixed interest rates.<sup>291</sup>

A reason for this behaviour lies in the difference between typical German and American customers. American

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<sup>289</sup> also compare Spanier, H.D., 'Wettbewerb um den Privatkunden: Financial Services', in: Die Bank, vol.21, 1985, pp.548-53, here p.552.

<sup>290</sup> n.a., 'Quelle Bank beginnt Geschäftsbetrieb', in: Börsenzeitung, 12 Febr. 1990, p.6.

<sup>291</sup> *ibid.*

customers are 'educated' to go for one-stop-shopping, whereas Germans tend to follow the line of multi-stop shopping. Furthermore, the fact that significant shareholdings of commercial banks in all four large German retail organisations do exist<sup>292</sup> - Commerzbank and Deutsche Bank together for instance hold more than fifty percent of the share capital of Karstadt AG, and hence important voting rights on the supervisory board - is certainly an important factor that has an impact on the array of services to be provided by these retailers. It seems obvious that the bankers on the boards of these retail organisations had, and still have, an eye on the product strategy concerning direct competition to the products and services of their own organisations.

As long as these German retail organisations are not attempting to be a real and credible threat of substitution to the entire financial intermediation of commercial banks in the retail banking industry, the intensity of competition will be less strong in comparison to the USA. The currently relatively weak competitive position to commercial banks is also supported by the lack of refinancing sources resulting of the small range of

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<sup>292</sup> Credit institutions hold stakes of more than fifty percent in Karstadt AG, roughly thirty percent of the equity capital of Kaufhof AG, and a twenty-five percent stake in Horton AG.  
Bayerische Hypotheken- und Wechselbank AG, *ibid*, pp. 310, 332, 336.

consumer deposit products offered by these retailers. That trend of competition has also been pinpointed by a study of Arthur Anderson & Company, which analyzed competitive trends and tendencies in the European retail banking industry. Based on fieldwork and interviews done in 1985-86, A & A predicted that retailers will not gain a significant market share in the retail banking services industry within the interval of 1985-95: "Retailers are not expected to gain a significant share of the banking market. Since German customers have a cautious attitude towards security, competence, and trustworthiness, most of our respondents indicated that retailers will only have significant success in customer instalment financing and credit cards. Moreover, even these areas are not likely to be very profitable".<sup>293</sup>

Although, the bulk of data for this study was collected in the mid-1980s, the previously mentioned example of the mail-order giant Quelle indicates that the predicted trend is still valid. With regard to retailers' own charge cards, none of the large German retailers could reach a satisfactory distribution in comparison to their American counterpart. Despite the fact that the German retailers tried to imitate Sears concept of the SearsCharge card. As late as the Spring of 1988, German retailers attempted to

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<sup>293</sup> Arthur Anderson & Co., The Decade of Change: Banking in Europe - the next ten years, London, 1986, p.110.

break into the credit card market by launching a joined project called 'Deutsche Kreditkarte'<sup>294</sup> (German Credit Card). This project, however, never got off the ground, primarily because of the relatively high cost related to issue and management of the cards.<sup>295</sup> According to an analysis conducted by the German Retail Institution, the total cost of a retail credit card would amount to three percent of total sales for an individual retail organisation.<sup>296</sup> The German Wettbewerbsgesetz (Competition Act) on the other side does not permit to charge the customers for these extra costs not related to the purchased product. Hence, the only way for an individual retailer to recoup these costs is via higher prices, which in turn carries the risk of lower sales. In spite of these impeding factors, a few retailers started to issue their own retail cards with attractive credit limits and without card fees. Hertie AG, for instance, a large department store chain, issued 400,000 retail cards by the end of

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<sup>294</sup> n.a., 'Die Kreditkartenschlacht', in: Bankkaufmann, 12/1987, pp.29-31, here p.29.

<sup>295</sup> The main cost elements that have to be borne are:

- production cost of the card
- issuance cost, and customer account service cost
- authorization cost
- registration and tracking of sales done with a card
- creation and mailing of monthly account balances
- payment control
- court cost, if payment is denied

<sup>296</sup> IBM-Germany, unpublished analysis of the Retail Industry, 1990.

1989 and achieved seven percent of total sales in the same year via these cards.<sup>297</sup>

Apart from their involvement in consumer credit facilities, German retailers - in contrast to their US equivalent - also diversified into the insurance market on a broad basis. Karstadt AG and Kaufhof AG in the autumn of 1986 formed alliances with insurance companies by founding joint ventures owned by both partners on an equal basis.<sup>298</sup> The objective was to provide in-store financial centres staffed with trained employees of the insurance partner. However, both projects failed in 1988 due to a lack of enthusiasm, marketing support, allocated funds, and the perception of the retail partner 'that typical German households do not purchase insurance policies in a department store'.<sup>299</sup> As a consequence of this development, retailers in general still treat their insurance activities as a 'backwater business'.

Despite these developments, there do exist some business areas in which retailers finance activities represent competition to commercial banks:

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<sup>297</sup> Kohlleppel, L., 'POS - Vor dem Start', in: Bankinformationen, 04/1989, pp.10-19, here p.11; also IBM-Germany, unpublished analysis of the Retail Industry, 1990.

<sup>298</sup> Hirn, W. / Poweleit, M., *ibid*, p.234.

<sup>299</sup> *ibid*, pp. 234, 236.



- (a) instalment credit to consumers offered through the retailer's banking subsidiary are on average more attractive than a comparable short-term bank loan.
- (b) some other retailers, such as Quelle, are planning to issue credit cards and to get involved in the investment fund business.<sup>300</sup> In so doing, they are able to broaden their refinancing base which eventually will harm the banks credit business, and will widen the area of competition in financial services between both industries.

However, a strong penetration of the retail banking services market through retailers in Germany, even in the consumer credit segment, is impeded by mainly three barriers. Firstly, due to the universal banking system, the scope and efficiency of service provision within banks operating in that market segment is very high already. It is therefore extremely difficult and costly for a retailer to differentiate itself through, for instance, higher service standards or more attractive products. Secondly, the bank branch density in Germany is high compared to the USA due to non-existing interstate banking barriers. Hence one of Sears' paramount competitive advantages, namely its nationwide geographic spread, is simply not applicable as

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<sup>300</sup> n.a., 'Quelle Bank beginnt Geschäftsbetrieb', *ibid*, p.6.

a competitive advantage to the German market. Thirdly, due to the significant shareholdings of commercial banks in leading retail organisations, retailers tend to prefer cooperative steps instead of rivalry regarding the expansion of their array of financial services.<sup>301</sup>

#### **6.4 Commercial Banks' Strategic Reactions in both Countries**

The previous two sections have shown that the competitive developments and hence the intensity of rivalry between retail organisations and commercial banks in both countries differ significantly, which tends to impinge on the intensity of the strategic reaction. In general, however, it is worth recognizing that the market-entry of retailers has the potential to change the market-power and control at the point-of-sale (POS). From the banks' perspective, this trend implies the risk for the commercial banking industry in Germany and the USA to loose parts of the consumer finance and the funds transfer business as typical and traditional banking business. In order to avoid this development, the banks were forced to react at the point-of-sale. That strategic reaction is known under the heading 'POS-Banking'. POS-banking is

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<sup>301</sup> Arthur Anderson & Co., *ibid*, p.14.

basically determined by three functions:

- electronic payment at the point-of-sale via plastic cards instead of payment by cheques and cash
- electronic transfer of transactions from the retailer to the bank
- PIN-entry and authorization instead of manual signatures and their examination

POS-banking is targeted at a subsector of the approximately 60 billion transactions made in the US retailing industry<sup>302</sup>, and 13 billion in the German counterpart<sup>303</sup>, and can also be described as an attempt by the banking industry to tackle one of the remaining areas in the payment and funds transfer business where cash<sup>304</sup> and cheque payment is still predominant.

In the US, throughout the last decade, POS-banking has long been a business area neglected by most commercial banks, in part because of the rapid growth of the ATM-market<sup>305</sup>. Only since 1986, when the retail industry began

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<sup>302</sup> Steiner, T.D. / Teixeira, D.B., *ibid*, p.100.

<sup>303</sup> Kohlleppe, L., *ibid*, p.10.

<sup>304</sup> For further discussions about cash payments please see Kirkman, P., *ibid*, pp.8-15.

<sup>305</sup> compare McAndrews, J.J., 'The Evolution of Shared ATM Networks', in: Business Review, May/June 1991, pp.3-16.



to invade commercial banking business on a large scale, the number of POS terminal installations increased from a mere 17,000, to over 48,000 by 1989.<sup>306</sup> Appendix 15 provides more data on the number of installed machines.

Whereas the German POS-model<sup>307</sup> is a joint and nationwide operating system of the entire commercial banking industry, the US model is characterized by a variety of regional POS-systems. Due to the interstate banking regulations, POS-banking also belonged to the group of financial services only permitted to be performed on a state-wide and later regional basis. Hence, the strategy of many commercial banks was to cooperate in a certain region by setting up joint switch networks and transaction clearing facilities. In the process, the banks were able to gain ownership of only approximately fifty percent of the installed POS equipment, attached telecommunications and switching facilities. The reason is that retailers themselves are a major implementation force. A few large and enterprising retailers in the US installed proprietary systems in which they control their POS transaction up to

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<sup>306</sup> Wehenmeyer, Stefan, 'POS in USA: Grundsätzlich andere Struktur', in: Bank und Markt, June 1989, pp.22-25, here p.22.

<sup>307</sup> For an in-depth legal analysis of credit card and POS banking systems according to German civil law please see Petring, R., Störungen bei POS-Zahlungen, Frankfurt, 1990.

the point where it reaches the acquiring bank.<sup>308</sup> In addition, none of the US top ten draft capture networks - draft capture terminals are to date the most frequently used type of POS-terminal in the US - are owned and run by banks.<sup>309</sup>

Thus, the competitive strategy of retail organisations in this business area becomes clear. By issuing their own credit and debit cards, managing the data capturing and switching process at the point-of-sale, and running the data processing function related to the entire POS-banking process, they are in the position to provide 'everything out of one hand', and to take over traditional banking business in short-term consumer finance and funds transfer. Since the passage of Regulation E in Summer 1988, retail organisations are even permitted to clear card transactions via the ACH (Automated Clearing House), the EFT processor of the Federal Reserve System.<sup>310</sup> This regulation officially allows retailers to sidestep the POS-banking networks set up by the commercial banking industry, and thereby constitutes direct independence from the transaction fee system otherwise imposed by banks.

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<sup>308</sup> Steiner and Teixeira have listed several examples such as J.C.Penny, ARCO, MOBIL etc.  
Steiner, T.D. / Teixeira, D.B., *ibid*, p.105.

<sup>309</sup> *ibid*.

<sup>310</sup> Wehenmeyer, S., *ibid*, p.25.

Apart from retailers' proprietary systems, one of the main problems related to banks' strategic reply is the required participation of retail organisations. POS networks require the acceptance of a wide range of bank and nonbank cards, merchant deposit accounting, the integration of many different POS terminals, the establishment of back-office processing facilities, software packages, and the like; in other words, setting up and running POS-banking facilities means substantial IT investments. Attempting to recover at least part of these costs, through imposing high transaction cost on participating retailers, proved to be counterproductive and deterred many retailers from cooperating with banks. Thus, both the banks and retailers, because of the cost factor, did not particularly push the concept of POS-banking in the US throughout the last decade. In 1989, only ninety-two million POS-transactions were made, less than 0.2 percent of the number of cheque transactions.<sup>311</sup>

On the other side, POS-banking certainly has its justification in that it reduces the transaction cost for a purchase down to an estimated 32 cents, whereas an average cash purchase amounts to 48 cents, 50 cents for a cheque payment, and 97 cents for a credit card. In Germany, similar significant cost differences have also

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<sup>311</sup> Steiner, T.D. / Teixeira, D.B., *ibid*, p.100.

been estimated.<sup>312</sup> In addition, it could also reduce the amount of cheque losses and provide faster checkout service.

However, despite the competitive threat of retailers to take over parts of the funds transfer and consumer finance business, the implementation of proprietary systems, and also despite the POS activities between 1986-89, POS-banking did not evolve as a major banking utility throughout the last decade. It might increase in significance towards the mid-1990s, but that remains to be seen.

In order to prevent losing business to competing nonbanks, the German commercial banking industry started a joint action culminating in the German POS-banking agreement signed in the end of 1984 by all members of the industry.<sup>313</sup> This agreement<sup>314</sup> entrusted the GZS

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<sup>312</sup> The cost for a retail transaction in Germany were estimated:

- cash payment: 11.1 Pfennige
- cheque payment 41.1 Pfennige
- credit card 93.7 Pfennige

IBM-Germany, unpublished analysis of the Retail Industry, 1990; also Glogowski, E., Neue Finanzdienstleistungen: Bankenmärkte im Wandel, 2nd edn., Wiesbaden, 1990, p.133; also Steiner, T.D., / Teixeira, D.B., *ibid*, p.102.

<sup>313</sup> Rodewald, B., 'Point of Sale - mehr nur als Technik', in: Bankinformation, 11/1986, pp.9-13, here p.9.

(Gesellschaft für Zahlungssysteme)<sup>315</sup> with the task to develop a neutral and nationwide POS-banking system based on the eurocheque-card (EC-card).

In terms of competition, this agreement laid down:

- (a) the elimination of POS competition among individual banks because of a common solution
- (b) a common bargaining platform concerning the cost of POS-banking for the commercial banking industry, in that it stated that all costs of the retailing industry related to POS-banking have to be borne by the retailers themselves.

In particular this clause (b) of the agreement illustrates the perception of German commercial banks regarding the competitive threat of retailers.

The way the German commercial banking industry has

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<sup>314</sup> Schneider has written a complete chronological list of the agreements between the GZS and participating banks throughout the 1980s. Schneider, C.P., Point-of-Sale Zahlungen mit der EC Karte, Konstanz, 1990, Appendix.

<sup>315</sup> The GZS fulfils the following tasks:

- management of the Eurocard system
- management of the eurocheque system and its processing needs
- development and management of electronic procedures related to funds transfer in Germany (such as the ATM-network and POS banking)
- processing and issuance of traveller cheques

reacted towards the market-entry of nonbank competitors and POS-banking as a new technology, indicates a major difference to the US equivalent. The German banking industry, in terms of technology, tends to act rather cautiously and also prefers a centralized approach.<sup>316</sup> That means many data processing functions, electronic banking processes, and IT developments are either performed by a jointly owned institution such as the GZS <sup>317</sup>, or at the most performed by a few large DP-centres such as Fiducia (compare ch.4).

The reason for this centralized approach lies in the structure of the German banking system. In terms of branch density, savings and cooperative banks enjoy a competitive advantage over private commercial banks. This would be of great value for an individual, nationwide operating POS banking system of, for instance, the association of German savings banks. Large private commercial banks, on the other side, have a strong lobbying power. The only way to find a consensus that is beneficial to all members of the industry, therefore, is a joint solution that virtually

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<sup>316</sup> Schwabe, G. / Dolinsky, D. / Krcmar, H., 'Der Einsatzstand von Expertensystemen - eine Umfrage', in: Die Bank, 05/1990, pp.261-264, here p.261.

<sup>317</sup> Twenty percent of the GZS shares is held by DG-Bank (the head institution of the cooperative banks), forty percent by the association of German savings banks (DSGV), and the remainder by the five largest private commercial banks.

neutralises competition.

In December 1984, the GZS set up a test and pilot study based on an on-line POS-system that uses the magnetic-stripe technology of the EC-card. In 1987, only two-hundred POS-terminals were installed in two test cities, Berlin and Munich.<sup>318</sup> The GZS thereby operated as a switch-, authorization-, and clearing-institution for commercial banks and merchants. In the process, the GZS charged each connected retailer a fee of DM 0.07 per transaction, plus 0.2 percent of the purchase value.<sup>319</sup> Due to these costs, and the required investments in terminal and communication line technology, the response by retailers was initially very low. The price of a POS terminal in Germany ranges between DM 3,000 and DM 12,000; whereas the US equivalents are much cheaper (between \$500 and \$5000).<sup>320</sup>

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<sup>318</sup> Rodewald, B., *ibid*, p.10; also Dorner, H., 'Automatisierte Abwicklung von Zahlungskarten: Zum Stand der Dinge', in: Bank und Markt, Jan. 1988, pp. 14-18, here p.15.

<sup>319</sup> Gerke, W. / Oehler, A., 'Die Kosten eines POS-Banking Systems für Einzelhandel und Kreditwirtschaft und ihre Verteilung', in: Bank und Markt, Nov. 1986, pp.14-18, here p.14.

<sup>320</sup> Wehenmeyer, S., *ibid*, p.22; also Glogowski, E., *ibid*, p.134; also Gerke, W. / Oehler, A., 'Quantifizierbare Wirkungen von Point-Of-Sale-Systemen in der Kreditwirtschaft', in: Bank und Markt, 10/1986, pp.7-14.



In addition to this field study, the GZS in 1988/89 started another test project, concerning the usage of chip-card technology as a carrier technology<sup>321</sup> for a future nationwide POS-banking system. With the issue of 40,000 chip cards in a Bavarian district in the area of Regensburg, the GZS explored this technology throughout 1989.<sup>322</sup>

Apart from these two pilot-studies established by the GZS, there has not been any other POS-banking activity within the German commercial banking sector during the past decade. Only very recently, between 1990-92, the number of POS terminal installations, based on EC-card technology, has started to gain momentum. This was partly triggered by a new POS-banking movement that started in January 1990, the so-called electronic cash (EC-cash). EC-cash can be described as a process set up by the commercial banking industry to

- (a) overcome the indecisiveness of the GZS to complete a functionable and accepted concept for POS banking
- (b) introduce a decentralised approach independent of the

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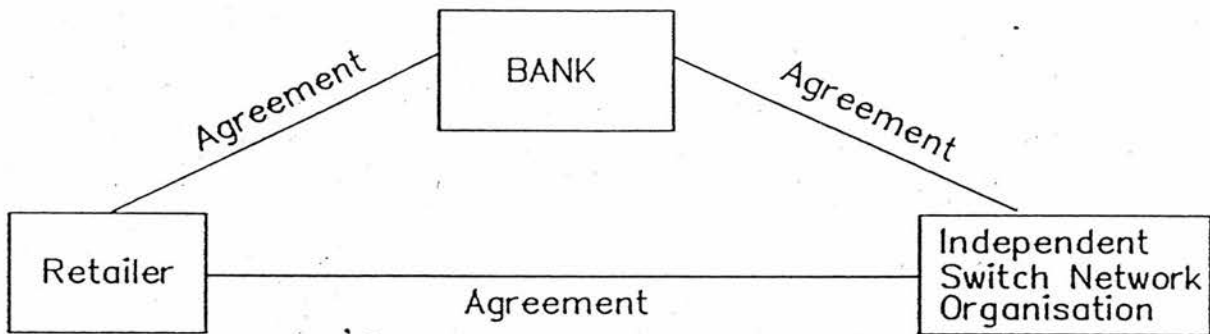
<sup>321</sup> For a detailed analysis of the technical specifications, the evolution, and functionality of cards and their underlying card technology in the German banking market please see Wigand, W., Die Karte mit dem Chip, Berlin, 1991.

<sup>322</sup> Kohlleppe, L., *ibid*, p.16; also Glogowski, E., *ibid*, p.134.

GZS

- (c) reduce the overall cost of POS-banking for retailers
- (d) create incentives for retailers to install POS equipment

EC-cash introduces a concept of multiple agreements in the form of a triangle.



**Figure 20: The German EC-Cash Model**

A retailer thereby signs an agreement with an array of commercial banks willing to participate, and also with an independent switch network organisation (eg. a company called Telecash which is a joined venture between IBM and the German Bundespost-Telekom). The banks guarantee the instant crediting (real-time) of all EC-cash transactions (and charge a fee), whereas the network organisation is responsible for the implementation of POS equipment, the running of the network, authorization, and clearing (this task was until 1990 fulfilled by the GZS only). The

retailer only has to pay a certain fraction of the purchase value to the network organisation to cover all cost and inconveniences related to the POS transaction. This percentage figure, however, depends on the number of POS terminals installed and the monthly EC-cash transaction figure.<sup>323</sup> If this concept gains acceptance throughout the 1990s, it could reintroduce competition between individual banks in the area of POS-banking.

Proprietary systems, as happened in the US retailing industry, have not been developed so far. The only important movement in that direction in the 1980s was done by American Express (Amex). This company established a joint venture, the Allcard Service GmbH (ACS), together with Alldata, a DP facility management organisation. ACS provided dedicated POS terminals, performed the authorization and clearing tasks via specifically implemented network facilities (based on Alldata hardware), and was responsible for the acquisition of participating merchants. Initially, this POS system was only based on Amex credit cards. Since Amex purchased the majority of ACS, it included eurocheque cards in order to

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<sup>323</sup> n.a., unpublished analysis by IBM Germany, Frankfurt, 1990, p.11.7.4.2.

gain wider acceptance.<sup>324</sup>

Thus, similar to the developments in the USA, but to a much stronger degree, German commercial banks did not regard the market-entry of retailers as a severe threat of competition, and hence did not push POS-banking as a major banking utility. Moreover, by the end of the 1980s POS-banking was still in the conceptual planning and experimentation stage. Appendix 15 presents an overview of the number of ATMs and EFTPOS terminals in leading industrialised countries.

#### **6.5 Effects on Commercial Banks' IT Strategy in both Countries**

The market-entry of retail organisations in Germany did not trigger any significant IT activities within a commercial bank due to two main reasons. Firstly, throughout the 1980s, POS-banking never left the planning and testing stage, and secondly, individual banks entrusted a central organisation (the GZS) with the required IT tasks related to the development of POS banking. Hence, an individual IT strategy concerning POS,

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<sup>324</sup> Klein, S., Informatisierung der Waren- und Kreditwirtschaft als Verhandlungsprozeß, unpublished working paper, University of Bremen, Oct. 1991, pp.1-10, here p.8.

that could have been changed, within a commercial bank was not necessary.

Within the last decade, the GZS invested roughly DM 110 million in both field studies and various other conceptual projects such as the Europlus card in 1988, or the POS cashing system in 1989, which were never realized.<sup>325</sup> A logical consequence in attempting to track the cost of POS for a large commercial bank would be to ask whether each stakeholder in the GZS had to pay its share of the cost? This would have been tantamount with bank internal project cost to finance an IT activity, although the activity was conducted externally.

As mentioned already, besides the POS responsibility, the GZS was for instance also responsible for the clearing and authorization of all transactions related to eurocheques and the Eurocard. It charged each participating bank a fee to process a transaction which resulted in a lucrative business, bearing in mind the usage frequency of eurocheques in Germany. The resulting profits were then used to finance such projects as POS. Thus, member banks did not have to make any financial contributions for POS development activities except in the

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<sup>325</sup> for a detailed historic overview of the individual stages of POS in Germany see Klein, S., *ibid*, slide 5.

case of payments to cover potential losses of the GZS in a certain year.

Furthermore, all relevant application development cost, hardware expenses such as POS terminals, networking facilities, and central mainframes were carried by the GZS. The only IT activities that were performed by individual banks were spasmodic enhancement and maintenance activities, to improve and update the card application systems.

A similar observation can be made in the US retail banking market. US Commercial banks also regarded POS banking as a 'test case' in which they decided to jointly participate in regional networks in order to minimize IT investment cost, but to be able to expand in case of a major breakthrough of POS banking. In contrast to their German counterparts, they initially had to spend more money to create the networks, implement the switching software, and to buy POS terminals, but as the installation figures show, only 30,000 additional terminals were purchased on a nationwide basis within 1986-89, despite the massive inroads of retailers. Moreover, approximately 50 percent of these additional terminals are owned by retailing organisations. According to a McKinsey market analysis done in 1990, only one bank, CoreStates, was well positioned in the POS banking market

by installing POS terminals in a number of department stores belonging to merchants participating with this bank.<sup>326</sup> Thus, most individual commercial banks did simply not react in terms of a change of their POS banking strategy to the market-entry of retail organisations.

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<sup>326</sup> Steiner, T.D. / Teixeira, D.B., *ibid*, p.104.



Retail organisations, due to the nature of their business as traditional providers of retail services to consumers and the resulting experience, which can be easily transferred to the provision of retail banking services, are competitors to commercial banks primarily in the area of consumer credit. Mainly driven by a sales promotion motif, they provide short-term consumer credit in the form of loans and credit cards to support sales of the merchandise. These products represent competitive threats of substitution to commercial banks' equivalent services because of the fact that a credit need can be satisfied at the time of its creation, attractive conditions of retail credit cards as compared to bank cards, and the already established customer relationship including in-depth knowledge of the purchasing behaviour and financial situation of a customer. However, an unrestricted substitution link between retail and commercial bank credit facilities does not exist due to the on average lower creditworthiness of retailers' credit-takers as compared to commercial banks' credit-takers, and that most retailers still require bank credit facilities as their prime refinancing source. Nevertheless, retail organisations traditionally are in a strong position at the point-of-sale, and their growing involvement in additional sectors of the retail banking

market via the establishment of nonbank bank subsidiaries indicates their competitive direction.

Within this competitive environment, German commercial banks were in a relatively secure market position to respond to the market-entry. Due to the following factors they did not regard retailers' market-entry as a severe competitive threat within the 1980s.

- (1) Due to the universal banking system, the scope and efficiency of service provision by commercial banks in the consumer credit segment is very high already (this resembles high entry cost for retailers to differentiate themselves from banks)
- (2) The existence of a nationwide branch network of commercial banks, in contrast to the US where interstate banking restrictions have severely limited this development
- (3) Significant cross-shareholdings between leading enterprises of both industries
- (4) German law as opposed to US law mandates a full banking license for a retailer that is engaged in the credit business. This legislative barrier has traditionally limited the range of business

## activities for German retailers

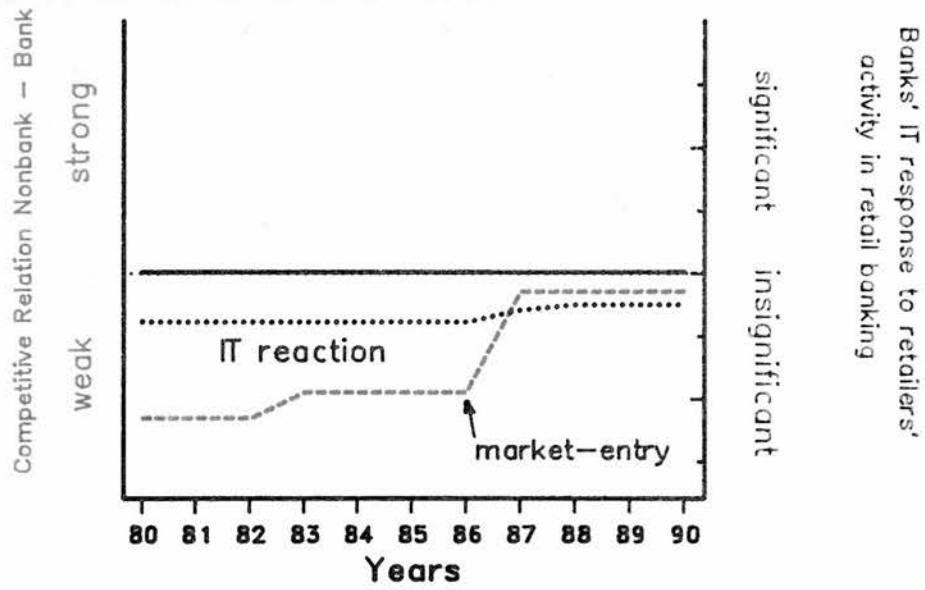
- (5) The mentality of typical German customers to keep a low level of short-term debt, and the preference of multi-stop shopping instead of one-stop shopping as in the US

In the US, due to more liberal nonbank regulations, the prohibition of cross-shareholdings, the favourable customer mentality of a preference for one-stop shopping, and the strong utilisation of credit cards as payment vehicles in tandem with a tendency towards higher levels of short-term consumer debt, retailers were in a stronger position than in Germany. Nevertheless, US commercial banks did also not regard retailers' market-entry as a significant competitive threat of substitution.

Competition between both industries in the US existed since the beginning of the 1980s because of retailers' creation of banking subsidiaries (by acquisitions in 1982-83) and the involvement in the securities business (ie Sears Roebuck's purchase of Dean Witter Reynolds). The market-entry, on a broad scale occurred in 1986, with Sears' introduction of the Discover card and the nationwide installation and expansion of in-store financial centres within the organisation's retail outlets. In addition, several retail organisations began

to install proprietary POS banking systems outside the banking industry. Triggered by this development, US commercial banks formed regional alliances to set up small POS banking networks and to share the cost of the required information technology. However, the fact that none of the top ten draft capture networks is run by banks in, conjunction with the small number of POS terminals installed at the end of the previous decade (48,000 on a nationwide basis), gives a clear indication that POS banking in the US commercial banking industry throughout the 1980s did not evolve as a major banking utility. In spite of stepped-up competition by retail organisations, commercial banks were not urged to change their IT strategy, in the sense of major investments in POS terminals, switching software, application development activities, or computer purchases, to fight off these competing retailers. The following diagram illustrates the relationship between the market-entry of this nonbank competitor and commercial banks' reaction in terms of IT.

# **Banks' IT reaction to the market-entry of retailers into the US retail banking market**



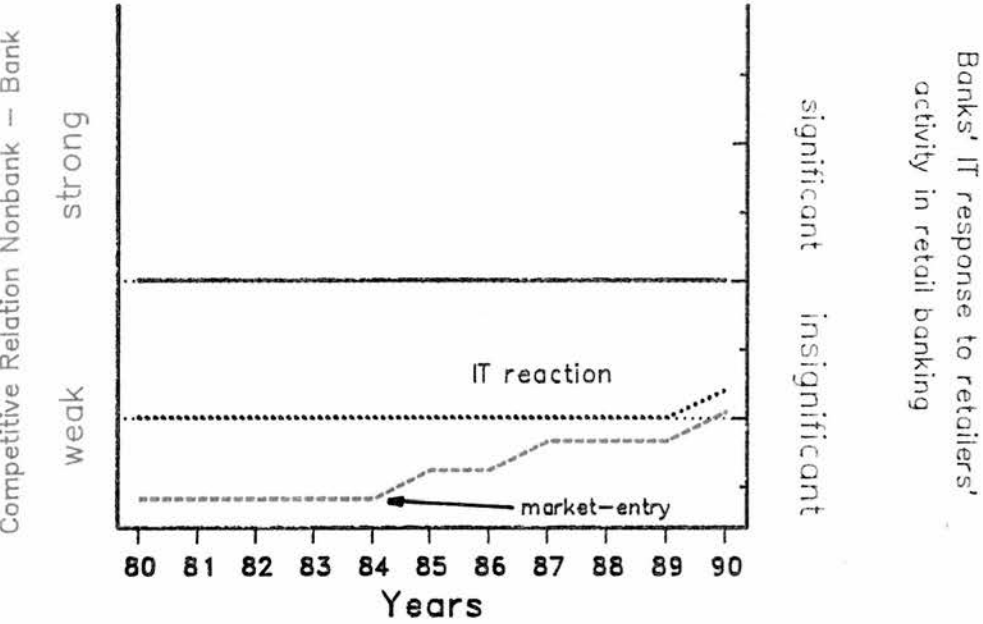
**Figure 21: Banks' IT Reaction to the Market-Entry of Retailers into the US Retail Banking Market**

In the German market, the intensity of competition between retailers and commercial banks was even weaker than the US situation. The market-entry of retailers at the end of 1984 and 1985, through the acquisition of bank subsidiaries, did not culminate in any strategic response,

including the IT strategy. Banks did not perceive retail organisations as a competitive threat because (1) the nonbank bank subsidiaries offered only a very limited product range, (2) retailers were still largely dependent on bank credit facilities as refinancing sources, and (3) a lack of management devotion, funds, and enthusiasm among retailers' top management for retail banking services was observable. In addition, the short-term diversification strategy into the insurance business in 1986, its subsequent failure in 1988, and the very late engagement in the card business (since 1988/89) with insignificant distribution figures as compared to the US, were factors that confirmed the banks' initial business strategy of 'relative inertia' concerning the market-entry of retailers. Similar to the reaction in the US market, their IT strategy could be identified as an experimentation and 'getting used to the technology' strategy. In contrast to the US, however, this strategy was performed by a jointly owned institution called GZS, so that individual commercial banks did not even have any IT expenses to conduct pilot studies and test installations. By the end of the previous decade, commercial banks' efforts to penetrate the point-of-sale with a clear-cut POS banking and therefore IT strategy had not left the planning stage. The uncertainty of the relevant information technology (ie the card technology) required, and the resulting indecisiveness, was also a limiting factor in this

context. The following diagram indicates the 'negative correlation' between the market-entry of retailers into the German retail banking market and the banks IT strategy.

# Banks' IT reaction to the market-entry of retailers into the German retail banking market



**Figure 22:** Banks' IT Reaction to the Market-Entry of Retailers into the German Retail Banking Market



## **7. Credit Card Organisations as Competitors in the Retail Banking Services Market**

### **7.1 Definition of Credit Card Services as Nonbank Business**

According to the three-party-system (compare section 3.3, and appendix 2), credit card organisations fulfil essentially three functions in dealing with participating merchants and cardholders. Throughout the process of a credit card business these functions are:

- (a) the credit card organisation performs a sales finance function for the participating merchant
- (b) it also - at least partially - performs a charge function for the cardholder
- (c) finally the credit card organisation represents a del credere function for the cardholder<sup>327</sup>

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<sup>327</sup> for a more detailed description compare Revell, J.R.S., 'Banking...', *ibid*, p. 21; also Penzkofer, P., 'Die Kreditkarte...', *ibid*, pp.18.

None of the above functions is listed in the German Banking Act (§1 of KWG) that qualifies for a banking license. In the US, the performance of these functions similarly does not require the constitution of a commercial bank.

To be more specific in the case of Germany, the sales finance function of the card issuing company does not meet the specified criterion of a typical bank credit which is 'the provision of instant money loans'<sup>328</sup>. With regard to the charge function mentioned under (b), the credit card organisation merely initiates the payment of debt outstanding without executing the entire transaction. The transaction itself is conducted via the customers' / cardholders' bank account and the banks internal giro and funds transfer network. Hence the card issuing company does not perform the giro business which would require a banking license under German banking law.

The German Banking Act<sup>329</sup> mandates an exclusive right for commercial banks to be engaged in the guarantee business. The del credere function performed by the card issuer does

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<sup>328</sup> Reischauer, F. / Kleinhans J., *ibid*, Tz. 23.

<sup>329</sup> §1, section 2 of KWG.

include a certain guarantee element<sup>330</sup>, namely the issuer's liability for the cardholder's payment of outstanding debt. This kind of guarantee, however, is not regarded as an individual guarantee service that carries a price as comparable bank services do. It is a *conditio sine qua non* of the credit card business, and as such of paramount interest to the card issuer and not the cardholder.<sup>331</sup> Therefore, German banking law does not subsume the credit card organisations' *del credere* function under typical banking guarantee functions.<sup>332</sup>

As a result of these legal aspects, the credit card services of credit card organisations can be defined as nonbank business. Only additional services such as the extension of the payment period, which are banking services under German banking law, would require a banking license from a credit card issuing company's perspective. In the US, the definition of a commercial bank does not enumerate any of the above factors.

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<sup>330</sup> For an in-depth discussion of legal issues related to the guarantee business under German civil law please see Petring, R., *ibid*, pp.144-148.

<sup>331</sup> In general, bank guarantees are granted in the interest of the client who pays for them.

<sup>332</sup> Reischauer, F. / Kleinhans, J., *ibid*, Tz.50.

## 7.2            Market Significance and Competitive Relevance of the Credit Card Business

The market significance of credit cards in the US and Germany differs significantly. The fact that all credit card organisations<sup>333</sup>, which are to date operating on a global scale<sup>334</sup> are based in the US, indicates the usage frequency of credit cards in that country and hence their importance as a convenient means of payment, as opposed to Germany. The difference in market acceptance<sup>335</sup> between both countries primarily originates from a different perception about credit and noncash payment behaviour. Appendix 14 provides an overview of the prime payment methods in selected industrial countries.

In the USA, the financial behaviour of a majority of the population is strongly influenced by a positive attitude towards short-term debt to satisfy consumption needs. This behaviour pattern led to the significance of cheques and credit card transactions within the payment system of the US. In addition, the lack of an efficient guarantee system for cheque clearings in the US made

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<sup>333</sup> compare Stammer, K., *ibid*, sect. 3.3.

<sup>334</sup> The most important organisations worldwide are American Express, Diners Club, Interbank Card Association (MasterCard), and BankAmericard Inc. (VISA).

<sup>335</sup> Market acceptance includes both merchants and private households.

credit cards the preferred means of payment for these short-term finance transactions.<sup>336</sup>

In Germany, eighty percent of all transactions are still paid cash. Of the remaining twenty percent, the credit transfer cheque is the most important (more than 50 percent) payment vehicle, followed by direct debit (more than thirty-five percent) and eurocheque (ten percent). The rest is paid by credit cards.<sup>337</sup> Appendix 14 provides an international comparison of the methods of payment used in various leading industrialised countries. Additionally, credit cards in Germany are to a very large extent used only as T & E (travel & entertainment) cards. The short-term consumer credit element is hardly utilised as compared to the US. This difference in behaviour is caused by the existence of extensive and traditionally widely used disposition credit facilities within current accounts. This disposition credit function in the US is linked to the credit card, which carries a certain credit limit, and not to current or checking accounts.

Apart from these general factors, there exists another reason for the less important status of credit cards in Germany throughout the 1980s. The well-established and

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<sup>336</sup> Morschbach, M., Struktur des Bankwesens in den USA, Frankfurt, 1981, p 68.

<sup>337</sup> Glogowski, E., *ibid*, p.112.

functioning euro-cheque system represented a high entry barrier, because of the high distribution figures (more than twenty million in 1990) and customer loyalty, for the market penetration of credit cards in Germany.<sup>338</sup> Appendix 7 indicates the distribution of credit cards in the 1980s.

However, credit card organisations represent a strong competitive threat to commercial banks in the retail banking services market. Created as so-called Travel & Entertainment cards (T & E cards)<sup>339</sup> in the late 1950s, these cards<sup>340</sup> were traditionally concentrated on the upmarket, wealthy private customers (HNWIs) who required a convenient, noncash, and efficient payment instrument on their business and pleasure trips. Thus, the credit card was a substitute service to short-term holiday credit. Elaborating from there, the credit card developed other competitive features such as a convenient credit facility in the short-term consumer finance market. It also represents a reserve purchasing power instrument that can

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<sup>338</sup> n.a., 'Alles auf eine Karte', in: Wirtschaftswoche, vol.38, iss.13, 1984, p.63.

<sup>339</sup> compare Revell, J.R.S., *ibid*, p.20.

<sup>340</sup> Only bank cards are credit cards in a narrower sense due to a certain credit limit implied in the card that must not be exceeded during a purchase. T & E cards, in contrast, are applicable without restraints, and they also do not require the opening of an account nor the payment of interest.  
Malschok, K.H., 'Die Position des Diners Club auf dem Deutschen Kreditkartenmarkt', in: Bank und Markt, Apr. 1982, p.16.

be used in circumstances of tight liquidity. The American Express card is a typical example of that.

As an independent, universal credit card issuer<sup>341</sup>, American Express (Amex) directly competes with bank credit card systems such as VISA or Mastercard that target the same market segment. In contrast to the universal and independent issuer Amex, that clearly belongs to the nonbank sector, VISA and Mastercard have been established by commercial banks for the purpose of creating a vehicle that deals with the credit card financing business of all participating (that is franchise-taking) member banks. Despite the fact that both organisations do not have a banking license, they need to be classified as institutions belonging to the commercial banking sector<sup>342</sup> because of their founders.

Nevertheless, the VISA or Mastercard franchisor bank is certainly a competitor for another bank that does not offer credit cards, in that the bank from whom a customer would otherwise have borrowed money to pay cash for a product will lose business to the card offering rival. This competitive relation, however, represents interbank

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<sup>341</sup> Another universal credit card issuer, namely Sears Roebuck with its Discover Card, has been discussed already in the previous chapter.

<sup>342</sup> Thompson, T.W. / Edwards, R.D., *ibid*, p.133,140.



competition and will not be discussed any further in this investigation due to the focus of this dissertation on nonbank market-entries and their resulting competitive relations with commercial banks.

Credit card services of independent card issuing organisations such as Amex are not only competitors in the provision of credit card finance. These organisations have also realized that a credit card represents an important key to other banking services. By diversifying for instance into the funds transfer business, lucrative market potential could open up via cross-selling effects.<sup>343</sup> Furthermore, credit cards embody a perfect advertising platform. Each time the card is produced for a transaction it shows the issuer's logo. This fact creates a high awareness of the brand that is ideal for cross-selling purposes.<sup>344</sup> Product loyalty will automatically build up that could be used to drag away customers from their traditional banks, and to create competition in many banking service classes.

These facets of the credit card services business are supported by a general shift in customers perception of

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<sup>343</sup> Bowden, P., 'Visas Strategie für Europa', in: Bank und Markt, Mar. 1987, pp.18-24, here p.18.

<sup>344</sup> compare Starke, W., 'Aufbruchstimmung im deutschen Kreditgewerbe', in: Bank und Markt, Oct. 1988, pp.14-16, here p.14.

money and consumption. According to a study undertaken by Amex in the German market<sup>345</sup>, this organisation identified three factors that even enhance the competitive relevance of credit cards in the future:

- the change in generations leads to 'the aware consumer', which in turn spurs the transformation process of traditional savers to consumers
- the in general relatively high level of education in Germany gradually leads to a redefinition of money and savings in the customer's perception
- the increase in wealth over the past twenty years requires more creative finance management

Banks that are faced with this increasing threat of substitution basically have three alternatives to respond. Firstly, the issue of various kinds of credit cards with service features similar to those of credit card organisations'. Secondly, the widely enhanced availability and provision of cash money. Thirdly, the increase of disposition credit limits in current accounts, which is a relevant option only in the German market as mentioned

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<sup>345</sup> n.a. unpublished presentation held at a banking seminar by Amex executives, Kampf um den Kunden, St. Goar, Febr. 1992, p.3.

already.

With regard to the first alternative, the issue of a variety of credit cards, the different card strategies applied by US and German banks will be discussed in section 7.4. However, a typical feature of the German retail banking market, the eurocheque card, which was identified as a significant entry-barrier already, needs to be analyzed in more detail regarding its defensive substitution potential to competing credit cards. The EC-card basically is a debit card linked to the bearer's current account. Throughout the 1980s it was only applicable in tandem with a eurocheque to verify its validity.<sup>346</sup> Both credit and EC-card guarantee the creditworthiness of the bearer up to a certain limit. Whereas the credit card represents a postponement of the actual payment of a purchased good, the EC-card is a payment instrument similar to cash payment. In Germany, the application possibilities of credit cards are still smaller in comparison to EC-cards and related eurocheques (although this gap is shrinking), because most merchants

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<sup>346</sup> At the end of 1990, a few large department stores such as Peek & Cloppenburg implemented test installations that utilised EC-cards' magnetic stripe and its encoded personal identification number (which was formerly only used at cash dispensers and automated teller machines) as online authorization vehicles against a negative file similar to the online authorization of credit cards. Hence, the underlying eurocheque was no longer required.

and companies accept eurocheques, but not all of them are contracted partners of credit card organisations. The main difference between both payment instruments, on the other hand, is that a eurocheque resembles only a guarantee instrument in the funds transfer between consumer and merchant, whereas a credit card also provides a credit function. Thus, a complete substitution between both payment instruments does not exist.<sup>347</sup>

A second alternative would be the widely enhanced provision of cash money. This is primarily done via proprietary or shared, nationwide ATM-networks in both countries. From a customer's perspective these machines represent convenient means to procure cash based on the magnetic stripe technology of the plastic card they already hold. However, looking at this option from a point-of-sale angle, it is much easier for a customer to produce a credit card instead of first stopping-by at an ATM which also may not be available in the current department store. In addition, these ATMs intend to support cash transactions in a more cost efficient way from a commercial bank's perspective, whereas credit cards are intended to push noncash business. Therefore, the alternative of enhanced cash provision is also not

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<sup>347</sup> also see n.a., 'Kreditkartengesellschaften im Aufwind, Partner oder Konkurrenten für Kreditinstitute', in: Kreditpraxis 1987, p.16.

applicable as a defensive action.

Finally, the extension of current accounts' disposition credit facilities in the German market could be a workable substitution possibility to rivalling credit cards issued by independent credit card organisations. This credit facility directly competes with the credit limits in general implied on credit cards. However, commercial banks charge substantial interest rates (around 9.5 percent at the end of the 1980s) if these overdraft facilities are utilised. In addition, transaction fees are charged which also increase the cost of a disposition credit. Hence, even the extension of disposition credit facilities only qualifies as a partial substitution to credit cards.

### 7.3 Analysis of Competition in the US and Germany

#### 7.3.1 Competitive Strategies of Credit Card Organisations in the US

To date there exist only two large independent providers of credit card services that operate the three-party-system. These are Amex and Sears Roebuck. Throughout 1990, AT & T, a US telecommunications company, diversified into the credit card business through its launch of the 'Universal card'. Initially offered as a fee-free card, it achieved 4.1 million account openings with outstanding receivables of more than \$1.3 billion at the end of 1990.<sup>348</sup> The card is essentially a VISA card that can be used to pay for phone calls. It remains to be seen whether AT & T's credit card programme will be profitable and successful in the future. AT & T's card system is a two-party system, because AT & T is both issuer and account holder for the transactions. Hence it will not be analyzed any further in this investigation. Due to the fact that Sears' strategy has been discussed already in the previous chapter, the following will be solely concentrated on Amex' strategy.<sup>349</sup>

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<sup>348</sup> Braitman, E., 'AT & T extends no-fee card plan', in: American Banker, 5 Dec. 1990, p.10.

<sup>349</sup> Diners Club will also not be discussed as a competitive card issuer because it was taken over by Citibank and thus belongs to the banking sector.

Competition between Amex and the commercial banking industry in the US is limited. It merely takes place as competition between the bank-borne organisations VISA and Mastercard, and Amex. The banks themselves regarded Amex more as a business partner than a rival until the early 1980s, because of higher returns that were achievable for member banks participating in the Amex' card system as compared to their own bank card systems.<sup>350</sup>

Originating from the T & E business<sup>351</sup>, Amex always had a specific target group in mind when diversifying into the retail banking market segment. It was and still is focused on the 'well-earning customer in the upper market segment' which is characterized by the following attributes:

- Performance orientated
- a demanding life-style
- managers and managers to-be

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<sup>350</sup> n.a., American Express- Bank friend or foe', in: The Bankers Magazine, vol.165, 1982, iss.1, pp.47-49, here p.48.

<sup>351</sup> Before diversifying into the credit card business Amex was known as a travel agency and issuer of traveller cheques. In 1958, Amex started issuing T & E cards in the USA targeted at wealthy customers. This step was regarded as a logical addition to the core travel business. Hence, the Amex card is not a typical bank credit card with a restricted credit limit. Judt, E., 'Kreditkarten - weltweites Zahlungsmittel', in: WIST Wirtschaftswissenschaftliches Studium, iss. 1, Jan. 1985, pp.39-42, here p.40.



- interested in professional money-management<sup>352</sup>

Accordingly, Amex' range of credit cards is tailored towards this market segment (Gold Card, Platinum Card, Corporate Card), apart from one exception, the personal card. By concentrating on high income earners Amex follows a consequent high-price strategy, that means high fees to create an elite image, in order to generate its earnings. In addition, Amex' merchant discount is much higher (on average 1-1.5 percent) than that of competing bankcards. This situation is tolerated by most participating merchants and retailers because, in general, transaction volumes charged on these cards are higher than on competing bankcards. Amex' transaction and processing cost are thereby comparable to those of other credit card issuers. Consequently, profitability figures were in good shape throughout the 1980s.

In 1981, Amex added on another competitive component by diversifying into investment banking. It took over Shearson Loeb Rhoades (1981), Investors Diversified Services (IDS) Inc. (1983), and Lehman Bros. (1984).<sup>353</sup> In

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<sup>352</sup> n.a., unpublished presentation by Amex executives...', *ibid*, p.14.

<sup>353</sup> n.a. 'Can Amex and Shearson Live Happily after the Merger?', in: Banking World, 18 May 1981, pp.82-87, here p.84; also  
n.a., 'The golden plan of American Express', in: Banking World, 30 April 1984, pp.70-74.

so doing, Amex was in the position to attract affluent customers' deposits away from banks.

On the other side, broker houses generally reach only the affluent part of the population who are financially sophisticated and more inclined to take risks. Through the IDS takeover, Amex expanded its reach into the middle income segment and undertook a step forward into the mass-market of retail banking. It also issued a so-called affinity card, the Optima card, at the end of the previous decade. This card quickly gained momentum and achieved several million accounts in the US by the end of 1988. Moreover, more than \$2 billion of balances were generated.<sup>354</sup>

As a strategic reply, commercial banks, from the mid-1980s onwards, started to rethink their role as distributors of Amex traveller cheques and gold cards, that establish bank lines of credit for Amex customers that these customers can draw on to cover their bills.<sup>355</sup>

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<sup>354</sup> Steiner, T.D. / Teixeira, D.B., *ibid*, p.123.

<sup>355</sup> n.a., *Can Amex and Shearson...*, *ibid*, p.83.

### 7.3.2 Development of Competition in the German Market

In Germany mainly two factors prevented the creation and rise of independent, universal credit card organisations. Firstly, the low significance of credit cards as payment instruments<sup>356</sup>, and secondly, the worldwide dominating market position of US credit card organisations. Consequently, all credit card institutions mentioned in the previous section established their own systems in Germany. Although - as we have seen in section 7.1 - the credit card business does not require a banking license under German banking law, all US card organisations, either directly or via related enterprises, are linked with a bank. American Express, for instance, founded its own commercial bank.<sup>357</sup>

In so doing, the company is in the position to diversify even further into typical bank deposit and credit business. Bearing in mind the strict market entry conditions of nonbanks under German banking law (see section 2.2.2.1), the establishment of a fully licensed bank was a logical solution to keep a door open for future

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<sup>356</sup> also see Frost & Sullivan's analysis of the German card market.  
Frost & Sullivan, The European Market For Automatic Retail Branch Banking, Winter 1990, pp.8.80-8.84.

<sup>357</sup> Otto, K.F., 'American Express in Deutschland - Notizen aus einem Pressegespräch', in: Bank und Markt, 1984, iss.6, p.17.

diversification strategies into other financial services areas. The requirement in the USA to prevent being supervised as a bank or to even own a bank subsidiary, because of the advantageous legal status of a nonbank, does not exist in the German market.

#### **7.4            Commercial Banks' Strategic Reactions to Intensifying Competition in both Countries**

Traditionally, the bank-borne credit card organisations VISA and Mastercard were specialised on mass-market credit cards to the lower and middle income-earner classes. In the US, participating member banks started to issue premium cards, thereby attempting to diversify into more upmarket segments of the business at the beginning of the 1980s. From 1981 onwards, they offered gold-cards with additional features similar to the ones of classical T & E cards.

Citicorp pursued a different approach to fight off competition. In 1981 and 1983 it acquired two of the elder but well-known card organisations in the US, Carte Blanche and Diners Club.<sup>358</sup> In addition to these types of cards, Citi also offers its bank credit card called Choice Card,

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<sup>358</sup> Malschok, K.H., *ibid*, p.16.

and participates in the VISA and MasterCard system. Since then, Citicorp as well as the member banks of the VISA or Mastercard network, have gradually added on more features, such as for instance insurance or travel services, to the range of services coming with a premium card. Thus, Citicorp's card strategy is clearly aimed at a strong penetration of the entire credit card market segment of the retail banking market. It thereby deliberately pushes competition in all segments of the US card market by offering a whole range of cards with partly overlapping service features.<sup>359</sup> Richard S Braddock, Citi's Chief Operating Officer (COO), expressed the bank's card strategy as follows:

"...I think their (AMEX) strategy historically has been image-based and now they are moving down-market. But our card line is getting quite broad as well. Not only do we have the normal credit cards and the gold versions, we have the Choice card, which is positioned as a price brand. It's gotten to be quite successful and is actually our fastest growing card."<sup>360</sup>

In Germany, commercial banks in 1977 founded the Eurocard system, according to the US model. The Eurocard is a worldwide useable T & E card that empowers the bearer to pay conveniently at a large number of contracted

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<sup>359</sup> Judt, E., 'Der US Kreditkartenmarkt im Überblick', in: Bank und Markt, Aug. 1985, pp.11-14, here p.12.

<sup>360</sup> Deutsch, B.I., 'A Conversation with Richard S Braddock', in: Bank Marketing, Jan. 1991, pp.16-21, here p.20.

merchants, hotels, restaurants, retailers etc. (in 1988 a total of 76330 accepting organisations). In a joint, concerted action, commercial banks established a company, the GZS<sup>361</sup> (Gesellschaft für Zahlungssysteme, a company responsible for payment systems) to manage the entire processing of the Eurocard system<sup>362</sup>, and also settled a cooperation agreement with Mastercard and the UK-based credit card system Access. The main objective of the founding member banks was to create a second cashless payment instrument at the point of sale besides the dominating eurocheques and eurocheque-cards. This objective is reflected by the relatively low distribution figures of Eurocards issued by Deutsche Bank until 1989. Only 115.000 cardholders could be contracted as opposed to a total of more than 20 million eurocheque cards being issued at the end of the previous decade.<sup>363</sup> Another related factor was that all large German clearers primarily targeted their own customers throughout the 1980s, ignoring the mass-marketing of their Eurocard.

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<sup>361</sup> see previous chapter, section 6.5.

<sup>362</sup> Schlöter, H.W., 'Zwei Jahre Eurocard: Marktchancen genutzt', in: Die Bank, 6/1979, pp.270-273, here p.270.

<sup>363</sup> n.a., 'Zum Privatkundengeschäft der drei Großbanken', in: Bank und Markt, June 1989, p.24; also Judt, E., 'Der europäische Kreditkartenmarkt - ein Überblick', in: Bank und Markt, July 1987, pp.19-25, here p.19.

However, in contrast to typical bank credit cards used in the USA, the Eurocard, as a product of a cooperation between all banking groups of the commercial banking sector, represents merely an extension of the product range provided for wealthy individuals. It is not an instrument to intensify short-term credit facilities on a mass-market basis.

Furthermore, as recently as January 1 1989, individual banks reached full responsibility regarding 'their Eurocard'.<sup>364</sup> Until 1989, only the GZS issued and serviced Eurocards, and also held the cardholders accounts. Since the beginning of 1989<sup>365</sup>, banks voted for the issue and administration of their own Eurocards, in order to differentiate themselves in terms of marketing, service, and product features from other commercial banks. At the same time, large commercial banks started to issue own label cards, such as the Deutsche Bank card or the S-Card of the savings banks. These cards can be characterised as multi-purpose service cards. They carry bank-specific logos, are equipped with magnetic stripes and PINs, and primarily serve as a personal means of contact and information between bank and customer. Unfortunately,

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<sup>364</sup> Glogowski, E., *ibid*, p.123.

<sup>365</sup> Co-branding possibilities between the 'big three' and other companies such as the agreement between Deutsche Bank and Lufthansa for the first time occurred in 1991.



these cards were so far only targeted as a substitute for other cards, to be used at the banks' own ATM-machines and other self-service terminals in order to withdraw cash or to printout account statements. They were neither created as credit cards, nor as a competitive or substitute product to the eurocheque and EC-card system. Hence, in terms of competition with credit card organisations' rivalling credit cards, these own label cards do not qualify as a substitute product<sup>366</sup> as in the case of US banks' own label cards. In line with the development in the US market, German banks in 1989 began to issue gold and other premium cards, and also included other attractive features such as travel services on these cards.

The main distinction between the German and American approaches, as a result of the way the Eurocard system evolved, is that the German commercial banking industry - in this market segment - is characterized by a general tendency for the concept of common solutions and the subsequent restriction of direct competition. In the US, in contrast, the concept of individualism - as demonstrated by Citicorp - appears to be a prevailing tendency.

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<sup>366</sup> Hoch, G., Die Kundenkreditkarte im deutschen Einzelhandel, Bayreuth, 1989, pp.152-154.

## **7.5 Commercial Banks' Strategic Reactions in the US and Germany in terms of IT**

As a consequence of the intensifying competition in the US credit card market at the beginning of the 1980s, due to Amex' strategic moves and the launch of retail credit cards such as Sears Roebuck's SearsCharge card (compare section 6.2), a process of centralisation took place. A commercial bank as for instance Citicorp, which in 1981 provided a variety of different cards ranging from own label credit cards to purchased labels such as Diners, decided to centralise its cards processing infrastructure. This decision among other things meant significant investment in information technology (hardware and software) to equip a completely new designed processing location. The required IT activities encompassed the transfer and large scale redesign of the entire credit card business system. The individual programming tasks ranged from credit applications, data capture, posting, and statementing functions, to issue and credit collection programs. At the beginning, the majority of these applications were coded as batch processing applications. From the mid-1980s onwards, however, Citi incrementally replaced these batch programs by online solutions. Bearing in mind that a credit card basically resembles a bundle of different features which are not necessarily provided by one organisation (ie the principle of affinity cards),

large databases and the related inquiry tools were also required, as well as extensive communication and software links from and to the group of individual service providers. This meant additional cost in the form of software licenses, related programming expenses, and hardware expenses to create the communication links. In addition, commercial banks such as Citicorp, that pursued the proprietary systems approach, were required to invest in authorization and clearing facilities. By the end of 1981, Citicorp had moved its entire credit card operations to Sioux Falls, South Dakota.<sup>367</sup> In toto, more than twenty percent of the IT budget devoted to retail banking in that year was spent to finance these IT activities. As already mentioned, the change in technology from batch to online processing toward the mid- 1980s constantly required additional IT investment in the card business. Similar relocation decisions were also made by credit card operations of other large BHCs.<sup>368</sup>

However, these relocation decisions and hence IT investments, were not only based on changes in the competitive environment. In addition, the deregulation of

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<sup>367</sup> Erdevig, Eleanor H, 'New directions for economic development - the banking industry', in: *Economic Perspectives*, FED of Chicago, Sept./Oct. 1988, pp.17-24, here p.19.

<sup>368</sup> compare Ringer, R., 'Lenders more restive over rate ceilings', in: The American Banker, 6 May 1982, p.3.

so-called usury ceilings (a special kind of interest rate ceiling on various types of consumer credit) - or to be more specific, its partial abolition - on credit cards, also supported the decision-making process. In May 1980, South Dakota passed a state regulation that removed rate ceilings on credit cards and allowed BHCs to charge out-of-state credit card customers the same interest rate as permitted by its home state.<sup>369</sup> This meant that large BHCs with a national charter, such as Citicorp, located in state X could export their rates to customers in state Y with lower ceilings. In a second event, the Competitive Equality Banking Act (CEBA) of 1987 allowed nonbanks to create national credit card banks permitted to issue credit cards on a nationwide basis.<sup>370</sup>

The partial removal<sup>371</sup> of these ceiling rates and the consequences of the CEBA, finally gave commercial banks the opportunity to compete with nonbanks on a more level playing field. Thus, a significant change in the banking

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<sup>369</sup> Erdevig, Eleanor H, 'New directions...', *ibid*, p.18.

<sup>370</sup> Among the top 25 card issuing banks are five nonbank credit card banks. These are Greenwood Trust (Discover card), American Express Centurion Bank, Associates National Bank, Household Bank, and Lomas Bank USA. Staten, M., 'Sorting Out Growth in Revolving Credit', in: Journal of Retail Banking, vol.12, no.1, Spring 1990, pp.67-71, here p.67.

<sup>371</sup> There still exist a few US states that keep usury ceilings as an integral part of their state banking legislation, despite the fact that the bulk of states has followed South Dakota's example.

legislation was also clearly supportive in the decision-making process for those substantial IT investments.

Similar to the strategic response (POS banking) to the market-entry of retailers, large German commercial banks did not 'change' their IT strategy concerning credit cards during the previous decade. The GZS provided the management, administration, and servicing of the issued credit cards, which, in turn did not create a need among commercial banks to purchase or develop application packages to perform these services themselves. Furthermore, the banks even refused to spend money in the processing of transactions related to the whole range of card services including both Eurocard and EC-card services. For this purpose they jointly set up a processing company, the Bankverlag, which is based in Cologne. Throughout the 1980s, this organisation overnight processed transaction tapes received from the participating banks covering their entire card services. Again, apart from a negligible data-entry system, including optical character readers and tape-units no IT investment was required.

This situation has changed since the beginning of the 1990s. With the issue of their own Eurocards and own label bank cards, all large German clearers started inhouse card processing facilities. In the process, they took over

services previously outsourced to the above mentioned organisations. This strategic move incurred substantial IT investment in 1990 and 1991. Due to the fact that virtually no IT infrastructure for card processing was implemented in these banks, they had to either design a card processing system from scratch, or to purchase an already existing system. In light of time pressure and nonexisting programming skill to develop a bank-internal solution, two large commercial banks (Commerzbank and Deutsche Bank) purchased the card processing system from Hogan, an American banking software specialist. Dresdner Bank, in turn, decided to design and develop its own in-house card processing application system. This decision was primarily triggered by Dresdner Bank's more conservative and modest growth estimate regarding the number of credit card holders in Germany by the mid-1990s.

The purchase cost and subsequent modifications and adjustments to the bank-internal IT standards, which employed a project team of twelve employees for almost a year (in the case of Deutsche Bank), amounted to roughly DM 12 million. Additionally, the banks purchased another card application to handle the management, distribution, and processing of their own label cards. In the case of Deutsche Bank, this institution at the same time acquired an application system called OCM 24 from SDM, an US banking software vendor, and integrated it into the

existing IT infrastructure. The costs attributable to this project were similarly high as compared to the Hogan system. Thus, roughly DM 25 million were spent on IT activities related to the application side of the card business only. Furthermore, hardware expenses such as mainframe and storage device upgrades, workstations in the branches to run the applications, and communication facilities to establish an online dialogue mode were required. However, due to the fact that these significant IT investments, which represent a substantial change in the German banks' IT strategy regarding the card business, happened in 1990 and mostly in 1991, they are on the very edge of the time frame chosen for this investigation.



Independent nonbank credit card organisations (such as Amex) are competitors to commercial banks in the area of consumer credit through the issue of rivalling credit cards. Benefitting from a general attitude among consumers toward convenient payment instruments, short-term debt to satisfy consumption needs, and a reserve purchasing power instrument in circumstances of tight liquidity, these credit cards represent competitive threats of substitution to commercial banks' equivalent services because of attractive features implied in the card and an image of exclusivity.

This threat of substitution, however, differs significantly in intensity between the US and German market because of mainly four factors. Firstly, the US population, on average, is more inclined to create short-term consumer debt than the German population. Credit cards are therefore more frequently used in the US as in Germany. Secondly, the lack of an efficient guarantee system for cheque clearings in the US, which in contrast exists in Germany, made credit cards the preferred payment vehicle for short-term transactions in the US. Thirdly, the most frequently utilised short-term credit facility in Germany is the disposition credit of standard current accounts. A facility that does not exist in the US banking

market. In addition, eighty percent of all transactions in Germany are still paid cash. Fourthly, the well-established eurocheque and EC-card system in Germany (more than 20 million cards issued in 1990) represented a substantial barrier to entry for all kinds of credit cards, and severely impeded the market penetration of credit cards in the German retail banking market throughout the 1980s.

Within this market environment, German commercial banks were in a very secure market position to respond to the market-entry of nonbank credit card organisations. Moreover, they did not regard them as severe competitive threats at all. Having entered the market in the 1970s as T & E cards, Amex in 1979 had reached only 132,900 cardholders.<sup>372</sup> Until 1986 roughly half a million cardholders could be contracted. In 1987/88 due to intensified marketing of the added values of gold and personal card features, supportive side-effects of the Amex bank, a growing middle market orientation, and image gains through investment banking activities by its subsidiaries targeted at HNWIs, Amex could increase its membership base up to 680,000. Stimulated by these efforts and by growing market acceptance of credit cards, German commercial banks in 1989 started to offer their own

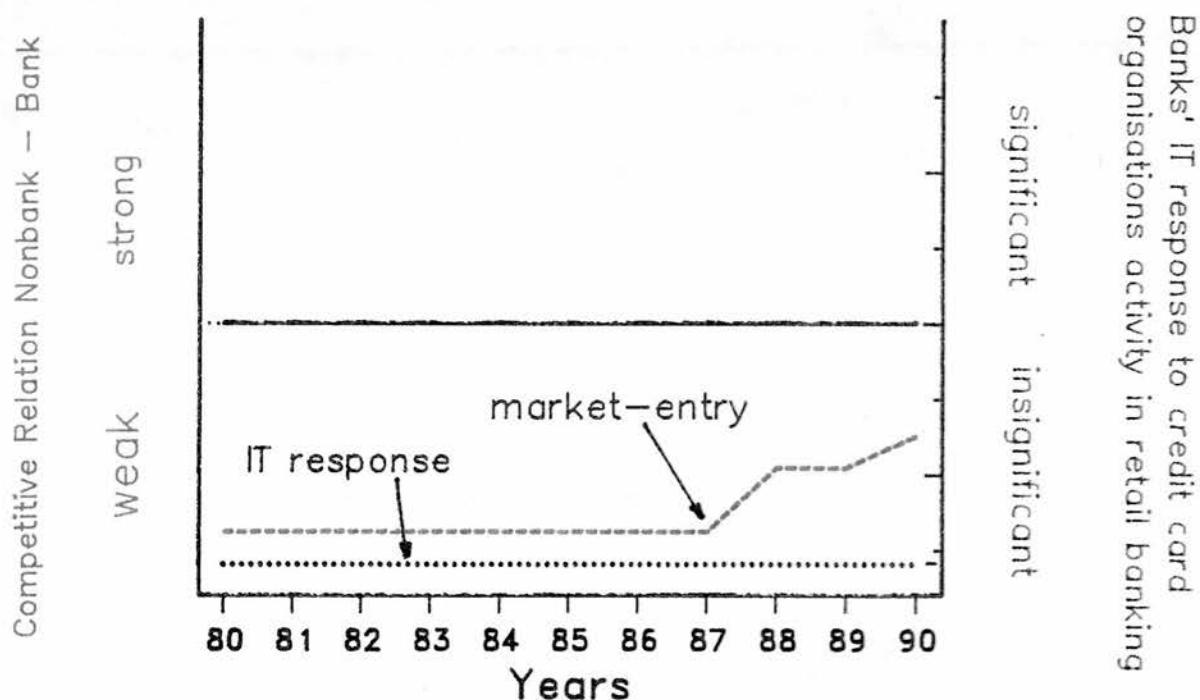
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<sup>372</sup> American Express, own records.

Eurocards, which were previously issued by the GZS only, provided premium versions with extended service features, and issued own-label multi-purpose service cards.

However, throughout the 1980s, German commercial banks stuck to the original market positioning of the Eurocard as a mere additional product (for travel and entertainment) to complete the product range offered to wealthy individuals. In spite of this slight increase in competition, German commercial banks did not change their 'IT strategy' of not having individual in-house card processing and management functions. The last decade was shaped by the GZS and the Bankverlag, which, as jointly owned institutions, fulfilled the entire card processing business for all participating member banks. The following diagram illustrates this 'negative correlation' between the market efforts of this nonbank competitor and commercial banks' reaction in terms of IT.

# **Banks' IT reaction to the market-entry of credit card organisations into the German retail banking market**

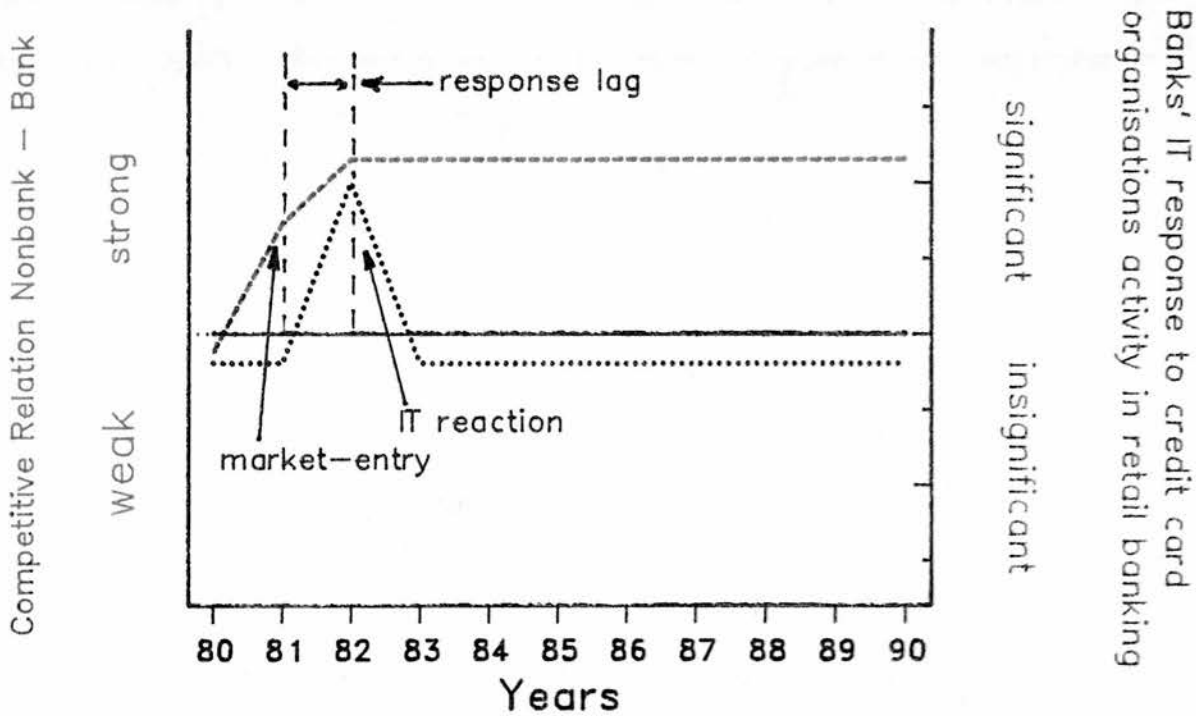


**Figure 23: Banks' IT Reaction to the Market-Entry of Credit Card Organisations into the German Retail Banking Market**

In the US, in contrast, the intensity of competition was much stronger. Triggered by stepped-up competition through Amex diversification into the wide area of investment banking in 1980/81, which attracted affluent

customers' deposits away from banks, its aggressive marketing of card services and penetration of merchants at the same time, and a generally supportive change in the banking legislation affecting the credit card business, US commercial banks, with Citicorp as a leader in 1981, decided to create large, centralised card processing centres, which required significant IT activities and hence investments (in toto more than twenty percent of the IT budget devoted to retail banking). This change in the IT strategy went in line with a new business strategy of treating credit cards as a core business. Citicorp's acquisition of Carte Blanche in 1981, Diners Club in 1982/83, and the rapid growth of VISA and MasterCard, that started at the same time, indicated this trend among leading US commercial banks (BancOne, CoreStates, Chase etc. pursued the same strategy). The following diagram graphically emphasizes the relationship between the market efforts of this nonbank competitor and commercial banks' response in terms of IT.

# **Banks' IT reaction to the market-entry of credit card organisations into the US retail banking market**



**Figure 24:** Banks' IT Reaction to the Market-Entry of Credit Card Organisation into the US Retail Banking Market

## **8. Discussion of the Main Findings**

This chapter outlines the key findings of the research without repeating all of those findings sufficiently discussed elsewhere. The findings are summarized within the framework of the research objective by first briefly pinpointing the starting positions of nonbank competitors in the US and German retail banking markets, and secondly by discussing the main results for each particular type of nonbank competitor. The findings of each individual nonbank type are then condensed into one broad picture and assessed as a totality in light of the perceived correlation under investigation. This chapter ends by making suggestions for further research in this area.

Since the passage of the Glass-Steagall Act of 1933 which established the separation banking system, the US banking system has been characterised by a constantly growing intensity of competition, due to diversification movements and the resulting increasingly overlapping product and service ranges among the competing groups of financial institutions. Furthermore, this competition even intensified throughout the 1980s through the inroads undertaken by non- and nearbank institutions into predominantly the retail banking market. The factors that initiated these diversification strategies, were primarily the traditionally high profitability ratios in the



commercial banking industry as compared to other industries, and the positive profitability outlook of the 1980s in the retail banking market segment, due to quantitative and qualitative changes in consumer demand patterns of financial services, and cost reduction potentials opened up through automation and rationalisation. In this context, liberal nonbank regulations allow the provision of virtually all banking products by nonbank competitors, whereas commercial banks are constrained by regulatory business restrictions of substantial competitive relevance.

The differences and divergent developments of competition between banks and nonbanks in the German market that were demonstrated in this investigation originate from different competitive starting positions, which are a consequence of divergent banking systems and banking regulations between the US and German banking system. With regard to the changing demand pattern of financial services and the perception of the significance of IT for a modern commercial bank, both factors, however, showed almost parallel developments in both countries. Similarly, the selected types of nonbanks, insurance companies, thrift institutions, retail organisations, and credit card organisations, and their respective substitute products and services are observable in both banking markets. Diversification strategies, substitution

potential, and business activities of these nonbank competitors, however, only partially culminated in intensified competitive relations to commercial banks' equivalent in both countries because of mainly two reasons. Firstly, the nonbank activities did not always reach a critical mass in terms of quantity to become a significant substitution threat parallel in both countries. Second, the aggregated negative implications on commercial banks were not always severe enough to trigger major response strategies to the same extent in the US and Germany. Hence, the strategic response of US and German commercial banks to the market-entry of various types of nonbanks differs. With regard to the hypothesis that a significant change of the retail banking market environment is directly correlated with a significant change in a commercial banks' IT strategy, this outcome, per se, is not detrimental. As long as the direct correlation can be shown, it does not matter which type of nonbank in which banking market triggered a significant change in the IT strategy.

In the case of the market-entry of life insurers in the US via the provision of capital creating life insurance policies in the form of New Wave Policies at the end of 1984, commercial banks did not respond because of three reasons, (a) competition between insurance companies and banks was traditionally high already caused by the strong

market acceptance of insurance policies, (b) the regulatory separation between the insurance and commercial banking industries created a highly constrained environment for commercial banks to respond, (c) the cooperation between investment banks and insurance companies could not be counterbalanced because of the Glass-Steagall Act. The market-entry of insurers was perceived as insignificant and commercial banks were not forced to respond at all. Hence, a significant change in the banks' IT strategy was not observable. Accordingly, the aggregated cost of IT activities attributable to the strategic response of commercial banks were negligible.

In Germany, in contrast, the level of competition was relatively low because of the function of the insurance industry as a refinancing source for commercial banks, and traditional cooperation agreements between banks and insurers in the provision of credit and insurance services to private households. Thus, the provision of capital creating life insurance products on a broad scale in the second half of 1985, with its fish-trap effects on the deposit potential (disintermediation) within the commercial banking sector that meant a major upheaval, was regarded as a severe competitive threat, and hence answered accordingly. Fiducia's reaction at the end of 1986 and 1987, which represents about 25 percent of the German retail banking market, with a response lag of

roughly 15 months, marked the strategic response of the German commercial banking industry. In that year, well over 20 percent of the IT budget devoted to retail banking was spent on IT activities related to the market-entry of this type of nonbank competitor. The strategic reaction of Deutsche and Dresdner Bank, although in 1989, with similar system expense figures, underlines this behaviour.

With regard to the market-entry of thrift institutions into the retail banking market in 1982 through the provision of attractive sight deposits and a wider range of credit services, almost identical to the services offered by commercial banks, which was initiated by product range liberalisations caused by newly enacted banking regulations (DIDMCA, Garn.St-Germain Act), US commercial banks hardly responded. The reason is that thrift institutions, due to their nature and existing interstate banking regulations, only qualified as very local competitors. In addition, product range, geographical, and emergency deregulations strengthened commercial banks' market position relative to thrift institutions. Thus, similar to the 'response' to the market-entry of insurers, US commercial banks considered the market-entry of thrift institutions as insignificant and behaved accordingly in terms of their IT strategy. The German Bausparkassen, in contrast, traditionally operated in the legally protected market niche of long-term

property finance and mortgage lending, with a very limited product set as compared to US thrifts, and also established a nationwide branch network. The provision of innovative products, with attributes that qualified as direct substitutes to banks' savings products, on a nationwide basis in the first half of 1985, paired with a generally improving house building and construction market in the second half of the previous decade, led to a much stronger increase in the competitive relation between banks and Bausparkassen than in the US market. In order to avoid negative business implications in the deposit side of the retail banking market, German commercial banks were urged to strategically respond to the market-entry of Bausparkassen. Again with a response lag of about one and a half years, Fiducia and Deutsche Bank in 1987 significantly changed their IT strategy by employing an array of IT activities, that meant between 20-25 percent of the IT budget in the retail banking function was devoted to a substantial strategic response in the market segment attacked by Bausparkassen.

Retail and credit card organisations primarily provide short-and medium term consumer credit and charge facilities. In the US retail banking market, these organisations traditionally have a strong market position because historically, commercial banks did not regard this market as extremely lucrative due to their specialisation.

The motivation of German retailers to provide sales finance instruments is only observable towards the end of the 1980s, since changing customer purchasing habits and diversification tendencies promise higher returns. Due to the fact that the financial services of both types of nonbanks are primarily based on various kinds of plastic cards (ranging from credit cards, to own label store cards, to charge cards), the market opportunities and substitution potential of these financial service providers within the retail banking market, is mainly determined by the usage frequency and acceptance of these card products among private households in a country, their perception about short-term consumer debt, and the availability of technology at the point-of-sale in tandem with the general level of automation in the banking industry of that country. Accordingly, the high proportion of card based transactions in the US represented inter alia a driving motive for retailers to launch their own credit cards on a broad scale in 1986, to expand in-store financial centres, and to install small proprietary POS-banking systems. However, due to the fact that only a limited substitution link between retailers' credit facilities and comparable bank credit facilities exist, caused by different creditworthiness criteria, and the uncertainty of POS technology paired with market acceptance, US commercial banks only insignificantly responded to the market-entry of retailers. POS banking



did not evolve as a major banking utility of the US commercial banking industry throughout the 1980s. Only minor IT investments were made to participate in test draft capture networks, card technology projects and the like, which incurred negligible cost. Hence a significant change in the banks' IT strategy did not occur. In the German market, the market-entry of retailers through the establishment of bank subsidiaries in 1984/85, and the negligible card activities toward the end of the previous decade, did also not lead to any strategic response by German commercial banks, because (1) those nonbank bank subsidiaries offered only a very limited product range, (2) retailers were still largely dependent on bank credit facilities as a prime refinancing source, (3) due to the universal banking system, the scope and efficiency of service provision by commercial banks in the consumer credit segment is very high already, in part because of nationwide branch networks (4) a lack of devotion, funds, and enthusiasm among retailers' top management for retail banking services was observable, in conjunction with private households' reluctance to take up and utilise plastic card payment instruments. Consequently, German commercial banks did not significantly change their IT-strategy. Moreover, due to the tendency of joint technological solutions in the German banking industry, banks established a jointly owned institution called GZS that conducted pilot studies and test installations



regarding POS banking. Hence, German commercial banks had virtually no system expenses in this business area throughout the previous decade. In addition, POS banking, in line with the US situation, never left the planning and experimentation stage in the 1980s.

This situation was reversed in the case of the market-entry of credit card organisations. Supported by high usage frequencies of plastic cards, a high market acceptance of credit cards in the US population, and the lack of an efficient guarantee system for cheque clearings, aggressive card strategies by independent credit card organisations such as Amex, linked with a broad move into the financial services industry (also into investment banking) in 1981, were perceived as a strong threat of substitution and a significant change in competition in the card segment of the retail banking market. Facilitated by a change in the banking legislation (the abolition of usury ceilings on several short-term credit vehicles in various states), commercial banks responded with a significant change in their IT strategy, in that they centralised their card processing facilities. Citicorp was first in 1981/82, with a time lag of about a year, to set up completely new processing facilities which meant substantial IT investments. Well over 20 percent of the IT budget devoted to retail banking in that year was spent to finance the necessary IT activities. In the

German market, in contrast, commercial banks did not respond to the increase in competition through independent credit card organisations (Amex) in 1987/88. Due to the insignificant distribution figures of credit cards in the 1980s, the existence of EC-cards as an entry barrier, and German customers' generally cautious attitude toward short-term debt, German commercial banks did not change their 'IT strategy', throughout the 1980s, of not having individual in-house card processing units. Similar to the market-entry of retailers, jointly owned institutions (among others again the GZS) conducted the card processing tasks. Only as recently as 1991, the big three German clearers have purchased substantial card processing packages, and hence changed their IT strategy.

In looking at the market-entry of each type of nonbank competitor in the retail banking market of both countries throughout the 1980s, and commercial banks' strategic response in terms of IT, in light of the hypothesis under investigation, the above findings demonstrate that only in three cases, out of a total of eight cases, a significant change in the IT strategy occurred as a consequence of a market-entry.

In analyzing each market-entry separately, it is observable that only three entries were perceived as significant among commercial banks. This is the case

because the competitive and strategic scale of these entries, the market-entry of life insurers and Bausparkassen in Germany, and credit card organisations in the US, differs substantially from the scale in the other five entries. Extremely negative implications on the deposit-side of the retail banking business of German commercial banks, and, on the short-term, consumer credit business of US commercial banks, were expected. Hence, large-scale and quick response activities were required that led to a significant change in the banks' IT strategy, expressed in a surge of their IT budgets in the year of the banks' strategic response.

Thus, according to the hypothesis, that a significant change in the banks' market environment due to the market-entry of nonbank competitors is directly correlated with a significant change in the banks' IT strategy, only the above three cases are relevant. Moreover, the findings concerning the substantial IT reactions in the above cases occurred as a strategic response to these relevant market-entries. This outcome, that all cases of a significant market-entry led to a significant change in the banks' IT strategy, suggests that a direct correlation exists. Hence, the hypothesis must be accepted. In addition, a response lag between market-entry and IT reaction of 1-1.5 years was observable in all relevant cases.

Furthermore, the findings of section 2.1.3 suggest that the market launch of technological innovations does not lead to immediate changes in the banks' IT strategy. Commercial banks, in contrast, appear to be rather cautious in significantly taking up technological innovations, which is reflected in time lags of at least two to two-and-a-half years. Hence, the potential correlation between technological innovations, and the banks' IT strategy as the main trigger for a change in the banks' IT strategy seems to be rather weak.

The results of this research also relate to academic work done in the 1980s that established the concept of IT as a competitive weapon.<sup>373</sup> In exploiting information technology resources in line with a change in the IT strategy, a bank might be able to create competitive advantages over rivalling nonbank competitors. This is certainly a fascinating topic that requires a more thorough analysis in further academic research.

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<sup>373</sup> Parsons, G.L., 'Information Technology: A new Competitive Weapon', in: The McKinsey Quarterly, Spring 1984, pp.45-60; also Porter, M.E., Competitive Strategy, New York, 1980, Ch.2; also Porter, M.E., Competitive Advantage, New York, 1985.

## **8.1            Limitations of the Research**

No research can legitimately claim having explored all aspects of and angles to a specific research problem. This is also true for this research. It was the research objective to look at changes in commercial banks' IT strategy caused by a change in the market environment solely from the perspective of market-entries by nonbank competitors, leaving aside other factors, such as response to interbank competition or the market-entry of foreign banks. Such an approach is a necessary strategy in a complex and turbulent area such as retail banking and information technology to isolate the relevant research issue. On the other hand, pursuing this approach implies the limitation of neglecting the above aspects. However, the findings of this research provide the necessary framework and opportunities for further academic work that could explore the implications of interbank competition and the market-entry of foreign banks.

Another limitation of this research lies in the finding that a certain interdependence between technological innovations and the IT strategy of a commercial bank cannot be entirely rejected. Although the results of section 2.1.3 suggest that it appears to be rather weak with regard to the retail banking industry.

## 8.2 Further Research

This research has covered a wide range of issues, so inevitably the opportunities for further research are also considerable.

Apart from the pointer given in the previous section about further research into the wide area of interbank competition and its impact on the IT strategy of a commercial bank, the following research opportunities are also of strong interest.

It would be useful to build on these findings by analyzing the wholesale banking side of large commercial banks to find out whether a similar correlation exists. This would help to pinpoint characteristics that are specific to the retail banking function.

Another area worth looking at are for example smaller commercial banks or even a different industry, such as the savings banks, in order to widen the applicability of this research.

## **Appendices**



## Appendix 1

### Summary of the main questions and answers per bank during the qualitative research of stage 2

#### Fiducia Informationszentrale AG

Respondents within Fiducia Informationszentrale AG:

1. Mr.B, CEO of the company, recruited Jan. 1992 from IBM
2. Mr.S, Divisional Manager Progeno (Application Development Subsidiary), same post for four years, previously career in software development with Fiducia
3. Mr.L, Controller IS/IT, 8 years with Fiducia in this function
4. Mr.K, Head of IT planning dept., previously responsible for the FIDIS/GENOS migration as project manager
5. Mr.Z, Divisional Manager Orga (Organisation and DP Subsidiary), two years in this position, previously a career in software development with Fiducia
6. Mr.Scha, IBM Industry Specialist, in this position for 8 years

These respondents were confronted with the following list of questions. Each respondent generally answered only a subset of the questions depending on his experience and

nature of the job. The aggregated insights gained are presented in the attached tableau.

## **1. Strategy and Marketing - Retail banking**

1. What is the general corporate/marketing strategy towards nonbank competitors ? Towards insurers, thrifts, retailers, and credit card organisations ?
- A1. Nonbank competitors are increasingly regarded as significant competitors in retail banking services. Our organisation has responded towards these competitors by building up closer relations with our traditional partners R + V and BSH. Particularly the market entry of insurers and independent Bausparkassen (thrifts) in the second half of the 1980s had an impact on our business. Retailers and credit card organisations were not regarded as severe competitors.
2. When did the market-entry occur ?
- A2. Insurers entered the retail banking market in a significant scale in 1985 and independent Bausparkassen did the same thing in 1986. The other two nonbank competitors came later in 1987 and 88.
3. Could you please comment on the event (and date shown)?
- A3. Yes, these market-entry dates and the services you mentioned seem to be correct. I remember several meetings when we were discussing these nonbank activities.
4. What effect did the market-entry have on the organisation and the product line affected ?
- A4. The growth rates in various service lines of our partner banks, in particular long-term savings plans, mortgages, and long-term financing started to slacken.
5. Why did the market-entry occur ?
- A5. Insurers were trying to broaden their first deposit base by issuing capital creating life insurance policies. They were also attracted by the stable profit margins in retail banking services, the trend towards All-finance which started to gain momentum in 1985, and the more yield orientated attitude of customers. Bausparkassen, in turn, were affected by a

declining housebuilding market towards the mid-1980s. So, they had to do something to keep their profitability on a high level - which they always had due to the Bausparkassengesetz. Retailers and credit card companies are competitors primarily in the short-term consumer finance business. Retailers identified similarities in terms of service characteristics between retailing and retail banking. They also tried to create a sales promotion vehicle by issuing store cards and credit facilities. Credit card organisations such as American Express were around for years. They wanted to benefit from the underdeveloped German card market and the growing usage of plastic cards in Germany from the second half of the 1980s onwards.

6. What are the characteristics of the nonbank competitor; advantages/weaknesses ? In relation to your own organisation ?
- A6. Insurance organisations provide their services via a highly flexible, mobile, and aggressive sales force. Hence, a good product can penetrate the market very quickly. Their staff is also well trained. The same applies for Bausparkassen. Bank branches are naturally much more static. On the other hand, bank customers tend to be rather loyal. With regard to retailers, they don't have a reputation as credit service providers. There is also the reluctance of German customers to sign a credit contract in a department store or to pay by store cards. I don't think that German retailers can copy a company like Sears. The German market, in that respect, is different from the US market.  
American Express has a long tradition as a T & E card provider. American Express cards are also used by companies as corporate credit cards. But I do not believe that it could significantly harm the banking industry (ie by mass-marketing credit cards), bearing in mind the high distribution figures of EC cards, and the Eurocard, which was substantially pushed in 1990 and 1991.
7. What was the market penetration strategy applied by the nonbank competitor ?
- A7. Insurers used their well trained sales force. They also took over established banks and started to siphon off revenues from the banking industry. Bausparkassen pursued the same approach. Just look at the Wüstenrot conglomerate. Retailers tried to imitate Sears by creating in-store financial centres and issuing store cards. But they were not really successful. American Express increased its number of features on the card,

and also widened its target group by offering 'normal' credit cards targeted at middle-class income earners.

8. What, if any, changes would you expect regarding nonbank competition in the various product lines ?
- A8. Throughout the 1990s we are now prepared to fight off any further attacks by these nonbank competitors. At the moment I cannot see any other nonbank competitor that could establish a significant threat. Interbank competition will certainly be a constantly strong competitive force in particular in light of the forthcoming Single Market in Europe.
9. Did your organisation regard the market-entry as significant ? If so, why ?
- A9. Only the market-entry of insurers and independent Bausparkassen was perceived to be of a significant nature (please see question 6). Hence, we responded accordingly. The activities of retailers and independent credit card issuers were regarded as insignificant because of the nature of the German card market, the high branch density and scope of service provision of our partner banks, and the attitude of German customers to generally keep low levels of short-term indebtedness.
10. Could you describe the competitive relation between nonbank competitor and your organisation. Is it weak or strong ? Please specify.
- A10. The competitive relation between our organisation and insurers and Bausparkassen developed from a fairly weak relation, due to traditional cooperations, into a strong relation throughout the previous decade. With regard to retailers and credit card organisations, the competitive relation was very weak and remained so throughout the 1980s. Competition in the credit card segment only started to intensify to some extent over the last two years (1989-91/92).
11. What was your organisation's strategic response ?
- A11. We intensified the link-up between the cooperative banks and their traditional partners BSH and R + V insurance group.
12. When did the strategic response happen ?
- A12. We first focused on the R + V connection. This link was widely enhanced by the end of 1986. In 1987, we had implemented a much better link-up with Bauspar-

kasse Schwäbisch Hall.

13. Could you please specify the business activities undertaken ?

A13. The business activities required were mainly IT related. We also increased our training efforts to prepare our partner banks' staff to more aggressively sell products of these partner organisations by using specifically developed system applications.

14. What changes, if any, were required within your organisation ?

A14. Apart from an increase in awareness, none, because traditionally the link was already in place.

## **2. IT Strategy, role, development, and cost**

1. How would you regard the role of IT/IS within the banking industry ? Within retail banking ?

A1. IT definitely has developed into a critical success factor for the banking industry. Without IT, not only in retail banking, but also in investment banking, hardly any transaction could be made. We are living in a high-tech, inter-related world, and banking has to reflect that as well.

2. IS/IT - importance in your organisation ? Position in the organisation ? Likely development ?

A2. We are the central DP and application development organisation for cooperative banks in the South and SouthWest of Germany. In 1990, roughly 600 individual partner banks were linked to our institution. Fiducia has always been among the frontrunners in terms of state-of-the-art technology in banking. This will not change in the future.

3. How has IS/IT changed the relationships with your business partners ?

A3. Traditionally, we have had relationships with R + V and BSH which implies a loose IT connection. Since 1987, when we implemented a computer-to-computer communication link, mutual database access facilities, file transfer possibilities etc. this relationship is much closer. Not only in terms of IT. It also meant the coordination and matching of Fiducia's IT architecture and BSH 's / R+V's architecture where interfaces had to be implemented.



4. What are current IT strategies in your organisation ?
- A4. We are currently working on the design of an enterprise-wide data model and possibilities to restructure our entire information architecture.
5. Could you describe the IT strategy of your organisation throughout the 1980s ?
- A5. The major IT strategy, apart from cyclical change management, was the transformation of our Fidis/Genos central customer management and service system from hierarchical database structures into the relational world. Due to growing numbers of requests by many partner banks for more online services, easier database access facilities, and increasing Genos transaction figures, the original system was to be migrated according to a three-phased plan. Firstly, in 1985 - with the increasing market acceptance of relational database systems - the operational database segments managing the daily business of a bank were to be migrated in the new database shell. In a second step, the application programs accessing the database system needed to be modified according to the new tools and software requirements. During the third step, originally planned towards the end of the 1980s, data of related organisations should be integrated. In other words, the evolution of the Genos system was planned as an incremental process.
6. How did your organisation respond in terms of IT to the market-entry of nonbank competitors ?
- A6. In line with the decision to create a much closer link-up with our partners, we had to realise the IT connection much quicker (at least two years). We also needed more decentralised computer power in the individual banks to enable banking staff to sell a whole array of different financial services.
7. When, if ever, did the response occur ?
- A7. We responded to the market-entry of insurers in 1986 and to the market-entry of Bausparkassen in 1987. We did not respond to retailers market-entry activities, nor to those of credit-card organisations.
8. Could you please specify as detailed as possible what IT activities were performed directly attributable to the market-entry of a nonbank competitor ?
- A8. By mid-1986 an insurance application and database

system called Ruvis was developed and went on stream. This system was essentially a reduced image copy of R + V's customer database. In this context various project teams were engaged in coding extensive database extraction and matchcode programs. This was necessary because Fiducia's internal data identification and customer key system was completely different from R + V's equivalent. In addition, a new online dialogue system was developed to access to access various databases within the Ruvis system. All these activities required the purchase of relevant software licenses, such as DB2, Netmaster, AS, SQL, etc. Apart from these purchases and development activities a physical communication link was established in mid-1987 in order to establish direct file transfer between both partners. Furthermore, in light of the changing business requirements for cooperative banks, we needed widely enhanced decentralised computer power. Hence, Fiducia increased its number of installed PCs and terminals between 1986-87 by 159 %, from 187 to 455, and by 50 % from 4321 to 6470.

Similar IT activities were IT activities were required to establish the link-up between BSH and Fiducia. Two new long-term lending and Bauspar database systems, Hallis and Immoplan, were developed from scratch, and extensive matchcode, data extraction, and online access applications had to be designed. These activities were completed in 1987, and both systems went on stream shortly thereafter. Additionally, a communication line was put in place between Fiducia and BSH. With regard to specific IT activities regarding credit cards and POS between 1985-89, the GZS was responsible for all test projects, installations, and the like. We only maintained our existing EC-card application and started some development work in 1989 to create a new Genos segment that covered our Eurocard engagement. However, the bulk of these card related IT activities, in tandem with in-house card processing efforts, began in 1990 and 1991.

9. What were the cost of these IT activities ?

A9. I can only provide you with a very incomplete list of the cost of individual IT activities because of the confidential nature of this data. However, this list enables you to get an understanding of the magnitude of IT investment relevant to nonbank activities:

a) related to insurance:

- cost of purchased software licenses DM 550,000

- database licenses DM 330,000
- cost related to system integration and communication DM 2 Mio
- project cost to design the online system DM 300,000
- purchase of PCs DM 2 Mio
- purchase of banking terminals, more than DM 10 Mio

b) related to Bauspar:

- additional software licenses DM 160,000
- design and project cost DM 637,000
- additional communication expenditure DM 900,000
- additional decentralised PC and terminals, more than DM 3.5 Mio

The IT expenses regarding POS banking and credit cards were almost negligible (less than DM 1 Mio) throughout 1985-89.

10. What was the development (size) of the IT budget devoted to retail banking in your organisation ?

A10. Our IT budget was constantly growing throughout the previous decade.

11. Is the aggregated sum of the IT cost directly attributable to the market-entry of a nonbank competitor - in the year of the strategic response - bigger than 20 % of the IT budget devoted to retail banking in that year ?

A11. With regard to the activities performed in the area of insurance and Bauspar, the aggregated sum of these activities in 1986 and 1987 respectively, was bigger than 20 percent of the IT budget devoted to retail banking in that year. However, the aggregated IT expenses concerning POS and credit card business were much less than 20 percent. They were almost negligible during the previous decade.

12. Would you regard a change in technology as the main driver for a change in the IT strategy ?

A12. This is a very difficult question to answer. The technology needs to be available, otherwise there will not be any investment in it. On the other hand, market forces such as the market entry of nonbank competitors or strategic moves by bank competitors are certainly substantial factors. If these market forces are strong enough they certainly play an important role in the decision-making process regarding IT investment and



strategy.

### **Deutsche Bank AG**

Respondents within Deutsche Bank AG:

1. Mr.Ra, Director of Organisation, recruited in 1988 from Chase Manhattan Bank
2. Mrs.On, Head of Strategic Planning IT, in this position for two years, previously career in software development with Deutsche Bank
3. Mrs.Re, Head of IT life insurance subsidiary, in this position since establishment of the subs. in 1989
4. Mr.Ba, Assistant Director life insurance subs., recruited in 1990
5. Mr.Sc, Product Manager Card Business, in this position since 1989, previously a career in retail banking services
6. Mr.Fe, Head of IT Bausparkasse subs., in the position since 1990, previously systems design with the parent company
7. Mr.Bu, Assistant Director Bausparkasse subs., recruited in 1988

These respondents were confronted with the following list of questions. Each respondent generally answered only a subset of the questions depending on his experience and

nature of the job. The aggregated insights gained are presented in the attached tableau.

### **1. Strategy and Marketing - Retail banking**

1. What is the general corporate/marketing strategy towards nonbank competitors ? Towards insurers, thrifts, retailers, and credit card organisations ?
- A1. Throughout the previous decade, primarily around 1985-87, nonbank organisations intensified their inroads into traditional retail banking business. However, only two of the four types of nonbanks, namely insurers and thrifts (Bausparkassen) were regarded as serious competitors. Deutsche Bank responded to them by firstly creating cooperations with institutions of these industries, and secondly by setting up, de novo, own subsidiaries, the Deutsche Bank Bauspar AG, and the Deutsche Bank Lebensversicherung AG.
2. When did the market-entry occur ?
- A2. Insurers were first in entering the retail banking market in 1985. Independent Bausparkassen followed somewhat later in 1986. Retailers and credit card institutions were later towards the end of the previous decade.
3. Could you please comment on the event (and date shown)?
- A3. The financial services offered by these nonbank competitors and the relevant market-entry dates seem to be correct. We analyzed them carefully and discussed our response.
4. What effect did the market-entry have on the organisation and the product line affected ?
- A4. Growth rates in our deposit business started to slow down because these nonbank products were substitutes to our normal savings accounts and long-term savings plans.
5. Why did the market-entry occur ?
- A5. Lets start with the market-entry of Baussparkassen

because we first created our Bauspar subs. in 1987 and then the insurance subs. in 1989. Bausparkassen traditionally enjoyed a legally sheltered marketplace. However, their profits started to decline in the mid-1980s due to a deteriorating housebuilding market. They attempted to diversify - within their legal limits - into our savings and mortgage business to generate profits. Insurers were competitors in long-term saving plans for a long time. However, the steady growth rates and high profitability of retail banking, paired with the general trend towards All-finance, were reasons for them to enter the retail banking market. Retailers and credit card organisations, such as American Express, showed some increased market activity but never really entered the market. I suppose reasons for them were consumer credit via store cards as a means of sales promotion in the case of retailers, and an increased slice of the modestly growing plastic card market in Germany between 1987-89.

6. What are the characteristics of the nonbank competitor; advantages/weaknesses ? In relation to your own organisation ?
- A6. With regard to Bausparkassen and insurers, both use a well trained, mobile, and aggressive salesforce. This enables them to quickly market new products. They are also knowledgeable in how to sell financial services, an asset that for instance retailers lack. On the other hand, Deutsche Bank has a relatively dense, nationwide branch network. Additionally, customers in general are very loyal towards their 'Hausbank'. American Express can build on its tradition as T & E card provider in attempting to enter the mass market for credit cards. However, two factors will limit this company's market potential. Firstly, the distribution of the EC card and the Eurocard which the banking industry began to push strongly in 1989/90.
7. What was the market penetration strategy applied by the nonbank competitor ?
- 7A. Insurers penetrated the market by the launch of substitute products via their aggressive salesforce. But they also tried to break into the banking market by setting up investment banking subs, such as the Allianz group did, and by taking over fully licensed commercial banks, for instance the Aachner-Münchener insurance group acquired the BfG bank. Large independent Bausparkassen also took over established banks or started de novo. An example for that is the

BHW group. Retailers, such as Hertie, formed alliances with banks and insurers in order to provide financial services on their own premises. In addition, they issued store cards, such the Hertie or Massa card. American Express pushed the 'green' credit card targeted at the middle income range, and also provided more features.

8. What, if any, changes would you expect regarding nonbank competition in the various product lines ?
- A8. There are no signs in the marketplace that nonbank competition will significantly increase over the next few years.
9. Did your organisation regard the market-entry as significant ? If so, why ?
- A9. Deutsche Bank regarded the market-entry of credit card institutions (American Express) and retailers as insignificant because of the underdeveloped German plastic card market, the attitude of typical Germans to maintain low levels of short-term consumer debt as compared to Americans, the fact that the efforts undertaken by these competitors were only of minor strength, and the existence of a well functioning eurocheque system. The market-entry of insurers and Bausparkassen, in contrast, was perceived as significant, because we could see and feel the efforts undertaken by these competitors.
10. Could you describe the competitive relation between nonbank competitor and your organisation. Is it weak or strong ? Please specify.
- A10. The competitive relation between our organisation and retailers as well as credit card organisations was weak throughout the previous decade. In the case of Bausparkassen and insurers, it developed from a relatively weak relation caused by traditional cooperations into a strong relation during the second half of the 1980s.
11. What was your organisation's strategic response ?
- A11. We first issued new competitive products, such as the Banksparrplan mit Versicherungsschutz via our traditional partners, but then the decision was made to create subsidiaries in both industries, the DB Lebensversicherung and DB Bauspar, in order to be independent from a third party. Another reason was to



benefit from different growth figures in those industries, ie the strongly growing housebuilding market from 1986/87 onwards.

12. When did the strategic response happen ?

A12. The Deutsche Bank Bauspar AG was founded in 1987, and the Deutsche Bank Lebensversicherung AG was established in 1989.

13. Could you please specify the business activities undertaken ?

A13. We had to integrate both subsidiaries into the DB network. We also had to hire extensively experienced staff from both industries in tandem with training efforts of our banking staff. Both subsidiaries needed to be hooked up with our central IT organisation, and administrative functions had to be implemented within the new organisation. Finally, an independent salesforce had to be gradually build up.

14. What changes, if any, were required within your organisation ?

A14. Banking staff in our branch outlets, which are the prime distribution channel, had to cope with a whole array of new financial services on top of the traditional banking services.

## **2. IT Strategy, role, development, and cost**

1. How would you regard the role of IT/IS within the banking industry ? Within retail banking ?

A1. Information technology is an absolute must within a modern commercial bank. Deutsche Bank for instance, has devoted itself to a steadily growing technology investment program to remain state-of-the-art regarding banking technology over the last five years. This program covers both areas, wholesale as well as retail banking.

2. IS/IT - importance in your organisation ? Position in the organisation ? Likely development ?

A2. The IS/IT function has increasingly gained higher importance in our organisation. Not only since

internal studies have shown what will happen when the main DP centre would break down for a couple of days. IT will certainly become even more important during this decade.

3. How has IS/IT changed the relationships with your business partners ?
- A3. Traditionally we had cooperations with business partners such as the Berlinische Lebensversicherung AG. However, those cooperations did not require substantial IT activities. Only since we founded our subsidiaries, we had to build up a completely new IT infrastructure in both subs., and both organisations had to be integrated into the parent's IT architecture.
4. What are current IT strategies in your organisation ?
- A4. We are currently working on a new branch office layout. This means a polarisation of self-service components on the one hand side, and intelligent financial services consulting stations on the other. We are also actively involved in gradually migrating various application and database systems from hierarchical to relational structures.
5. Could you describe the IT strategy of your organisation throughout the 1980s ?
- A5. The major IT strategy was to incrementally introduce state-of-the-art technology in all important business areas of the bank. This included the design of new applications, if demanded by the market, based on new technology (ie relational database structures) and thus the incremental migration into the 'new world'.
6. How did your organisation respond in terms of IT to the market-entry of nonbank competitors ?
- A6. In line with the decision to establish two subsidiaries from scratch, an entirely new IT infrastructure had to be implemented within these affiliates. This includes the widely increased implementation of decentralised computer power. Furthermore, both organisations had to be quickly integrated into the parent's IT infrastructure.
7. When, if ever, did the response occur ?

- A7. Deutsche Bank responded to the market-entry of Bausparkassen in 1987, and founded its insurance subsidiary in 1989. We did not respond to the market-entry of retailers and credit card organisations throughout the previous decade.
8. Could you please specify as detailed as possible what IT activities were performed directly attributable to the market-entry of a nonbank competitor ?
- A8. Due to a lack of in-depth programming skills in the insurance and Bauspar area, and because of the time pressure, Deutsche Bank, in both cases, decided to purchase existing application packages on the market and to subsequently modify them according to its internal standards. In due course, VVS, a central insurance application package was purchased in 1989. Extensive redesign and project activities were required to perform the modifications. Additionally, high speed communication lines had to be installed between the parent's DP centre and the subsidiary caused by the decision that VVS had to be installed on the parent's central mainframe system. Furthermore, a scanning and document retrieval system, called FileNet, with 126 PCs, optical disc storage facilities, and client-server technology to handle the insurance contract management was implemented in the subs. Bridge programs between the central and decentralised system were hence also required. Finally, the constant match between the parent's central customer management system called Cerberus, and VVS necessitated extensive programming activities. Similar IT activities were required to establish the IT infrastructure within the Bauspar subs. and to implement the integration. Deutsche Bank purchased the Bauspar-system from the LBS Kiel in 1987 and modified more than 800 programs. Furthermore, extensive data matching, bridge, and redesign activities were required. With regard to POS banking activities and card services hardly any IT activities were performed during the previous decade. Only very recently, in 1990 and 1991, Deutsche Bank purchased a complete in-house card processing system and attached software from Hogan and SDM, two specialist vendors for card management and processing technology.
9. What were the cost of these IT activities ?
- A9 Detailed and accurate cost figures are confidential. The following list provides an overview of selected IT cost items related to nonbanking business:



a) IT investment related to insurance:

- purchase and modification cost of VVS DM 12 Mio
- communication and DP utilisation cost DM 4.5 Mio
- decentralised FileNet-related cost DM 6 Mio
- various extensive project cost more than DM 10 Mio
- hardware and banking terminals, several million DM

b) IT investment related to Bauspar:

- purchase and modification of the Bauspar application system DM 6 Mio
- project and modification cost DM 5 Mio
- communication and DP utilisation cost DM 4 Mio
- hardware, cabling, and communication facilities DM 2.5 Mio
- banking terminals and decentralised computer power, more than DM 10 Mio

The IT expenses regarding POS banking and credit cards were almost negligible throughout the 1980s. However, Deutsche Bank, in 1990/91, spent roughly DM 25 Mio for the purchase and subsequent modification of in-house card management and processing technology (more than DM 12 Mio for the Hogan system, and the rest for a system called OCM 24 from SDM)

10. What was the development (size) of the IT budget devoted to retail banking in your organisation ?

A10. Primarily since we started our long-term IT investment program (mid-1980s) the IT budget was constantly growing.

11. Is the aggregated sum of the IT cost directly attributable to the market-entry of a nonbank competitor - in the year of the strategic response - bigger than 20 % of the IT budget devoted to retail banking in that year ?

A11. With regard to our insurance and Bauspar engagement, the aggregated sum of the IT cost in the year of the strategic response was between 20 and 25 % of the IT budget devoted to retail banking.

12. Would you regard a change in technology as the main driver for a change in the IT strategy ?

A12. We certainly had not invested heavily in terms of IT

if there wouldn't have been a market and therefore profit opportunity, and competitive changes in the marketplace forcing us to respond. It does not make sense to invest in IT just for the sake of it.

### **Dresdner Bank AG**

#### **Respondents within Dresdner Bank AG:**

1. Mr.Ri, Head of IT/IS function, recruited in 1988 from McKinsey & Co
2. Mr.So, Head of Strategic Planning IT, in this position since the mid-1980s
3. Mr.Go., Corporate Staff Project Planning and Cost Management, five years in the same position
4. Mr.Mu, Assistant Director Bausparkassen Subs., recruited in 1990
5. Mr.Si, IBM Account Manager Dresdner Bank, in this position for two years, previous experience as sales rep with Dresdner Bank
6. Mr.Scha, IBM Industry Specialist, in this position for 8 years

These respondents were confronted with the following list of questions. Each respondent generally answered only a subset of the questions depending on his experience and nature of the job. The aggregated insights gained are presented in the attached tableau.

## 1. Strategy and Marketing - Retail banking

1. What is the general corporate/marketing strategy towards nonbank competitors ? Towards insurers, thrifts, retailers, and credit card organisations ?
  - A1. Nonbank competitors, predominantly insurers and Bausparkassen, increasingly diversified into traditional banking business throughout the previous decade. Dresdner Bank responded to these movements by (a) building up closer relations with our traditional partner Allianz AG, and (b) by founding a Bausparkasse subsidiary. Retailers and independent credit card organisations were not regarded as severe competitors.
2. When did the market-entry occur ?
  - A2. Insurers' market-entry occurred in 1985, and independent Bausparkassen entered the retail banking market in 1986. The other two nonbank competitors came later in 1987.
3. Could you please comment on the event (and date shown)?
  - A3. The entry dates given and the related nonbank services seem to be correct. Our analyses came to similar results.
4. What effect did the market-entry have on the organisation and the product line affected ?
  - A4. Dresdner Bank, like the other large German clearers, felt slackening growth in our classical deposit business, such as various types of savings accounts, particularly in the years 1986-87.
5. Why did the market-entry occur ?
  - A5. There exists a variety of reasons for individual types of nonbanks to enter the retail banking market. Among the most important is certainly the traditionally stable profit margins in retail banking services, problems in their own industry, such as the declining housebuilding market that affected the Bauspar business in the mid-1980s, and the move among many contenders of the financial services industry towards the provision of All-finance services. Apart from the more general reasons, there were

nonbank-specific reasons, such as insurers' ambition to broaden their refinancing base on the back of the commercial banking industry. Retailers attempted to provide merchandise, consumer credit, and insurance services out of one hand, whereas credit card organisations intended to steal away a large market share of the slowly developing card market in Germany in the late 1980s.

6. What are the characteristics of the nonbank competitor; advantages/weaknesses ? In relation to your own organisation ?
- A6. Retailers and independent credit card institutions hardly possess substantial advantages over banks. Retailers merely attempted to imitate Sears Roebuck's financial services concept by issuing store cards (ie Kaufhof card) and offering credit services. However, retail organisations do not have the credibility to attract away bank customers. In addition, the German market is still very much cash and eurocheque-oriented which also represents a significant entry barrier for credit card organisations, such as American Express. Furthermore, Dresdner Bank, like the other large commercial banks, created the Eurocard in 1977/78, which we significantly pushed in 1990. With regard to insurers and independent Bausparkassen, their major advantage is the fast distribution channel for new financial services compared to our relatively inflexible branch outlets. On the other hand, we certainly have a customer loyalty advantage.
7. What was the market penetration strategy applied by the nonbank competitor ?
- A7. Insurance organisations penetrated the market by issuing capital creating life insurance policies via their aggressive salesforce. They also took over established banks and thereby started to attract away revenues from the banking industry. Independent Bausparkassen, such as Wüstenrot and BHW, also developed into financial services conglomerates by acquiring or setting up banking subsidiaries. Retail organisations created in-store financial centres offering short-term consumer credit and insurance services. They formed cooperation agreements with insurers and hired fully trained bankers to staff these centres. They also issued specific store cards, such as the Kaufhof or Hertie card. American Express, diversified from the traditional T & E market segment into the mass-market for credit cards by issuing various credit cards with different features.

8. What, if any, changes would you expect regarding nonbank competition in the various product lines ?
- A8. Due to our standing in the marketplace, the nationwide branch network, and the responses to attacks from nonbank competitors throughout the second half of the 1980s and the beginning of this decade, nonbank competition is not expected to grow in the near future.
9. Did your organisation regard the market-entry as significant ? If so, why ?
- A9. Only the market-entry of insurers and Bausparkassen were regarded as significant because of their potential to harm our refinancing base. Retailers and credit card organisations were perceived as weak competitors. This is true because of the nature of the German card market and the scope of service provision of our branch outlets.
10. Could you describe the competitive relation between nonbank competitor and your organisation. Is it weak or strong ? Please specify.
- A10. The competitive relation between American Express, retail organisations and Dresdner Bank was weak throughout the previous decade. On the other hand, the competitive relation between our organisation and insurers and Bausparkassen developed into a strong competitive relation during the second half of the 1980s.
11. What was your organisation's strategic response ?
- A11. Dresdner Bank chose to broker the products of existing insurance companies and in due course formed a close strategic alliance with Allianz AG. With regard to the Bauspar business, we decided to establish our own subsidiary.
12. When did the strategic response happen ?
- A12. We began to intensify the relation with Allianz in 1987, which ended up in an agreement in 1989, that Allianz developed into our exclusive supplier of insurance services. The Bauspar subsidiary was founded in 1990.



13. Could you please specify the business activities undertaken ?

A13. The main business activities undertaken were of an integrative nature. The Bauspar subs. had to be installed from scratch, including all administrative and IT related functions. The activities concerning the Allianz cooperation encompassed system integration, distribution channel selection, staff training, and related incentive scheme developments.

14. What changes, if any, were required within your organisation ?

A14. A transformation process was started that incrementally changed the typical bank teller into an more marketing-oriented sales person of banking products and various other financial services.

## **2. IT Strategy, role, development, and cost**

1. How would you regard the role of IT/IS within the banking industry ? Within retail banking ?

A1. Information technology is the engine that keeps a commercial bank going, especially in retail banking. If one looks at the recent developments in electronic banking services, such as self-service banking, the significance of IT is obvious.

2. IS/IT - importance in your organisation ? Position in the organisation ? Likely development ?

A2. IT has increasingly gained higher importance within Dresdner Bank during the previous decades. The head of the IT/IS function reports directly to the executive responsible for organisation and related banking services.

3. How has IS/IT changed the relationships with your business partners ?

A3. Before the Bauspar subsidiary was established, and the close link-up with Allianz was in place, there were hardly any IT connections with business partners. Both strategic movements, however, meant the implementation of advanced program-to-program communications and all

related physical tasks between the partners or between the subsidiary and the parent company.

4. What are current IT strategies in your organisation ?
- A4. Dresdner Bank has started to redesign its entire IT architecture based on relational structures and enterprise-wide data modelling.
5. Could you describe the IT strategy of your organisation throughout the 1980s ?
- A5. One of our major objectives was to further enhance the productivity of our back office functions through the implementation of state-of-the-art central computer power. In addition, Dresdner Bank attempted relatively early to implement a nationwide electronic banking concept, that is primarily self-service banking facilities, in its branches.
6. How did your organisation respond in terms of IT to the market-entry of nonbank competitors ?
- A6. With regard to the market-entry of Bausparkassen, we de novo established a Bauspar subsidiary. This meant the complete build up of a functionable IT infrastructure and the connection of this infrastructure with our central DP centre in both physical communications and application-wise. Similarly, a connection with Allianz had to be realised. We also needed more decentralised computer power in the branches in order to cope with the increased variety of financial services. The number of PCs devoted to financial services in the retail banking function of the bank grew significantly between 1987-91. In 1987, they grew by 55 %, in 1988 by 44 %, in 1989 again by 33 %, and in 1990, as well as in 1991 by 27 %.
7. When, if ever, did the response occur ?
- A7. Dresdner Bank built the close relation with Allianz in 1989, and founded its Bauspar subsidiary in 1990. We did not respond to the market-entry of retailers or independent credit card organisations throughout the previous decade.
8. Could you please specify as detailed as possible what IT activities were performed directly attributable to the market-entry of a nonbank competitor ?



- A8. With regard to the establishment of the Bauspar subsidiary, Dresdner Bank needed to be fast. Hence, an already existing Bauspar system was purchased and subsequently modified from the Landesbausparkasse Kiel. This included extensive redesign and programming activities. Additionally, sufficient computing power and storage facilities had to be reserved on the central CPU of the parent. Finally, communication links between the subsidiary and the parent were installed. Similarly, communication links, data extraction, bridge and matching programs between the central customer management systems of Allianz and Dresdner Bank had to be implemented. Our point-of-sale banking activities were negligible. Throughout the previous decade, there was no standard carrier technology available, the prices for POS equipment were very high, and the GZS did all project work. The card services for both EC cards and Eurocards were also covered by the GZS. Hence, only recently, in 1990, we started to develop our own in-house card processing system.
9. What were the cost of these IT activities ?
- A9. We cannot provide a list showing the cost of these individual IT activities because of the confidentiality of this data.
10. What was the development (size) of the IT budget devoted to retail banking in your organisation ?
- A10. On an averaged base, the IT budget was steadily growing over the past decade.
11. Is the aggregated sum of the IT cost directly attributable to the market-entry of a nonbank competitor - in the year of the strategic response - bigger than 20 % of the IT budget devoted to retail banking in that year ?
- A11. With regard to Dresdner Bank's strategic response to insurers in 1989, and Bausparkassen in 1990, the aggregated sum of IT cost directly attributable to the market-entry in these years, was bigger than twenty percent. The cost concerning POS and card services were much less.
12. Would you regard a change in technology as the main driver for a change in the IT strategy ?

A12. Technology is a necessary prerequisite for the implementation of strategies.

## **Commerzbank AG**

Respondents within Commerzbank AG:

1. Mr.Lu, Head of Market Analysis, in this position since 1987, previous experience in retail banking services and IT planning with Commerzbank
2. Mr.La, Head of Application Development, 7 years in this position
3. Mrs.Te, Product Management POS and Card business, recruited in 1988
4. Mr.Ges, IBM account Manager Commerzbank, in the position for 5 years
5. Mr.Scha, IBM Industry Specialist, in this position for 8 years

These respondents were confronted with the following list of questions. Each respondent generally answered only a subset of the questions depending on his experience and nature of the job. The aggregated insights gained are presented in the attached tableau.

### **1. Strategy and Marketing - Retail banking**

1. What is the general corporate/marketing strategy towards nonbank competitors ? Towards insurers, thrifts, retailers, and credit card organisations ?
- A1. Commerzbank has formed strategic alliances in the insurance business with Deutsche Beamtenversicherung AG, and in the Bausspar business with Leonberger

Bausparkasse. Retailers and independent credit card organisations were not regarded as critical competitors in the interval 1980-90.

2. When did the market-entry occur ?
  - A2. Insurance organisations entered the retail banking market in 1985, and Bausparkassen followed a year later. Retailers and credit card organisations attempted to do the same thing, but never really got off the ground.
3. Could you please comment on the event (and date shown)?
  - A3. Yes, according to my memory these are the correct services and entry dates.
4. What effect did the market-entry have on the organisation and the product line affected ?
  - A4. Commerzbank was faced with deteriorating growth figures in its deposit business in the last third of the previous decade which was caused by increased competition in the retail banking market segment.
5. Why did the market-entry occur ?
  - A5. These nonbank competitors were attracted by commercial banks' steady growth in retail banking. They wanted to participate in this growth potential. They also identified similarities in the provision of typical retail banking services and for instance insurance policies or Bauspar contracts. Finally, a reason for credit card organisations or retailers was certainly the relatively weak engagement of the commercial banking industry in the card business.
6. What are the characteristics of the nonbank competitor; advantages/weaknesses ? In relation to your own organisation ?
  - A6. Insurers and Bausparkassen are much more flexible in introducing new financial services due to their mobile salesforce. Their staff is also well trained and experienced. We, in turn, do have close relations with our customers, and also traditionally have a good reputation as banking service providers. Retailers, for example certainly have their problems in estab-

lishing financial credibility.

7. What was the market penetration strategy applied by the nonbank competitor ?
- A7. American Express tried to mass-market the credit card, by diversifying from their traditional T & E business and upmarket target group into the middle market segment. This company also increased the number of features on each card, apart from the variety of different cards. Retailers intended to benefit from the perceived concept of selling merchandise and simultaneously providing credit for it. Large Bausparkassen and insurers pursued an expansion strategy by taking over banks or setting up banking subsidiaries in conjunction with their normal distribution channels.
8. What, if any, changes would you expect regarding nonbank competition in the various product lines ?
- A8. I reckon the large German commercial banks, by now, are well positioned in the retail banking market segment. I cannot see a threat of substitution from any nonbank competitor just now.
9. Did your organisation regard the market-entry as significant ? If so, why ?
- A9. Only Bausparkassen and insurers were regarded as strong competitors and we reacted accordingly. They could severely harm our refinancing and first deposit base. The underdeveloped card market, the attitude of typical German customers to keep low levels of short-term consumer credit, the well respected and functioning EC-card system, all three were aspects that influenced the perception about American Express and retail organisations, such as Hertie or Quelle, to be only insignificant players in the retail banking market.
10. Could you describe the competitive relation between nonbank competitor and your organisation. Is it weak or strong ? Please specify.
- A10. Only the competitive relation between our organisation and insurers or Bausparkassen respectively developed into a strong competitive relation. With regard to the other two nonbank competitors, the competitive relation is very weak.



11. What was your organisation's strategic response ?

A11. Commerzbank intensified the link between its business partners, Deutsche Beamtenversicherung and Leonberger Bausparkasse.

12. When did the strategic response happen ?

A12. We intensified the link with Leonberger Bausparkasse in 1988, and in 1989 we had implemented a much better link-up with Deutsche Beamtenversicherung.

13. Could you please specify the business activities undertaken ?

A13. The business activities undertaken were mainly of an integrative nature and ranged from system integration in information technology and applications, over training of bankers to sell insurance policies and Bauspar contracts, to agreements covering the sharing of profits and award systems.

14. What changes, if any, were required within your organisation ?

A14. The recognition within each employee that retail banking gradually develops into financial services to the private customer which includes much more than typical savings accounts and credit.

## **2. IT Strategy, role, development, and cost**

1. How would you regard the role of IT/IS within the banking industry ? Within retail banking ?

A1. IT is the motor of retail banking. Electronic banking will become a key business segment in commercial banking in the near future. Hence, the role of IT will increase even further.

2. IS/IT - importance in your organisation ? Position in the organisation ? Likely development ?

A2. IT is currently part of the second management level reporting to the director of organisation and administrative/support services.

3. How has IS/IT changed the relationships with your business partners ?
- A3. Since the implementation of communication links, a common user access surface, and mutual database access facilities, the relationship with our business partners got much closer.
4. What are current IT strategies in your organisation ?
- A4. We are currently optimizing our common user access interface among Commerzbank and its business partners, and also started to work on the design of an enterprise-wide data model.
5. Could you describe the IT strategy of your organisation throughout the 1980s ?
- A5. The IT strategy of the 1980s was to enhance the labour saving automation of backoffice functions through the introduction of state-of-the-art technology in tandem with activities to support the customer interface.
6. How did your organisation respond in terms of IT to the market-entry of nonbank competitors ?
- A6. Commerzbank made the decision to create a close link-up with its business partners. Hence, the connection and system integration had to be realised. We also had to provide more decentralised computer power in our branches. Thus, we equipped banking staff entrusted with the job to sell for instance insurance policies with laptops.
7. When, if ever, did the response occur ?
- A7. Commerzbank responded to the market-entry of insurers in 1989, and to the market-entry of Bausparkassen in 1988.
8. Could you please specify as detailed as possible what IT activities were performed directly attributable to the market-entry of a nonbank competitor ?
- A8. With regard to the establishment of the IT link between Commerzbank and Leonberger Bausparkasse, as well as DBV extensive programming activities were required. Additionally, sufficient computing power and storage facilities had to be reserved on the central CPU. Communication links, data extraction, bridge and



matching programs between Commerzbank's central customer management systems and those of its partners had to be implemented. We also designed a common user access surface for all partners in the network, and agreed over standardized programming structures and interfaces.

Our point-of-sale banking activities were negligible. Throughout the previous decade, there was no POS technology available, the prices for POS equipment were high, and the GZS did all project work. The card services for both EC cards and Eurocards were also covered by the GZS. Hence, only recently in 1991, when the card market picked up, we purchased an in-house card processing system from Hogan, a US software vendor of credit card applications.

9. What were the cost of these IT activities ?

A9. This information is strictly confidential.

10. What was the development (size) of the IT budget devoted to retail banking in your organisation ?

A10. The budget developed not steadily upwards throughout the previous decade. However, on average, the budget size showed a rising tendency.

11. Is the aggregated sum of the IT cost directly attributable to the market-entry of a nonbank competitor - in the year of the strategic response - bigger than 20 % of the IT budget devoted to retail banking in that year ?

A11. With regard to the activities performed in the area of insurance and Bauspar, the aggregated sum of these activities in 1988 and 1989 respectively, was bigger than 20 percent of the IT budget devoted to retail banking in that year. However, the aggregated IT expenses concerning POS and credit card business were much less than 20 percent. They were almost negligible during the previous decade.

12. Would you regard a change in technology as the main driver for a change in the IT strategy ?

A12. There is certainly a relation between the availability of information technology and IT investments. However, I do not believe that any commercial bank would invest in information technology without a business need.

## **Citibank**

Respondents within Citibank:

1. Mr.Mal, Department Head of Public Affairs, in this position for three years
2. Mr.Fa, Executive of Citibank Germany, in this position since 1990; previously assignments in various functions in the US
3. Mr.Pri, IBM Account Manager Citibank, in this position since 1989
4. Mr.Gre, Industry consultant and project manager with McKinsey, 5 years banking and IT experience with McKinsey

These respondents were confronted with the following list of questions. Each respondent generally answered only a subset of the questions depending on his experience and nature of the job. The aggregated insights gained are presented in the attached tableau.

### **1. Strategy and Marketing - Retail banking**

1. What is the general corporate/marketing strategy towards nonbank competitors ? Towards insurers, thrifts, retailers, and credit card organisations ?
- A1. Retailers and thrifts were not regarded as strong competitors to the retail banking business in the interval 1980-90. Citi took over selected thrifts and transformed them into community type branch outlets. With regard to independent credit card organisations,

Citi decided to acquire two card issuing organisations on top of its own cards, and hence create a large card business. Due to the legal separation of insurance and commercial banking, and investment and commercial banking, Citi was strongly impeded to tackle insurers and the insurance business.

2. When did the market-entry occur ?

A2. American Express significantly entered the retail banking market in 1980/81, and thrifts followed a year later (triggered by deregulation). Insurers attempted to enter the market in 1985/86, and retailers did the same thing in 1986, but never really got off the ground (apart from their credit card business).

3. Could you please comment on the event (and date shown)?

A3. Yes, according to my memory these are the correct services and entry dates.

4. What effect did the market-entry have on the organisation and the product line affected ?

A4. Citi felt strong competition in the short-term consumer credit segment of the retail banking credit business when management decided to strongly push consumer banking at the beginning of the previous decade.

5. Why did the market-entry occur ?

A5. Nonbank competitors were attracted by commercial banks' steady growth and high profitability. They wanted to participate in this growth potential. They also identified similarities in the provision of typical retail banking services and for instance the retailing of merchandise or insurance services. Finally, a reason for credit card organisations, such as American Express was certainly the strong growth potential of credit cards as the main noncash payment vehicle that became visible towards the end of the 1970s.

6. What are the characteristics of the nonbank competitor; advantages/weaknesses ? In relation to your own organisation ?

A6. American Express had a long experience in the T & E

business including extensive customer databases which made quick contacts with customers easily possible in light of the introduction new card services aimed at a wider target group. Their staff is also well trained and experienced. Citi, in turn, does have close relations with its customers, and also traditionally has a good reputation as banking service providers. Retailers, for example certainly have their problems in establishing the credibility of a professional banking institution. Particularly, throughout the 1980s, large retailers like Sears Roebuck and also American Express had the advantage of establishing a nationwide network of locations whereas the interstate banking legislation prohibited commercial banks from doing the same.

7. What was the market penetration strategy applied by the nonbank competitor ?
- A7. American Express tried to mass-market the credit card, by diversifying from their traditional T & E business firstly into the upmarket target group of wealthy individuals by providing corporate and golden cards. They then also attacked the middle market segment through the provision of personal cards. This company also increased the number of features on each card, apart from the variety of different cards. Retailers intended to benefit from the perceived concept of selling merchandise and simultaneously providing credit for it (ie Sears concept of financial centres and the provision of store and credit cards), whereas thrifts simply started to offer substitute products (ie NOW accounts and MMDAs) as soon as they were legally permitted to do so. Large insurers pursued an expansion strategy by taking over investment banks or setting up investment banking subsidiaries in conjunction with their normal distribution channels.
8. What, if any, changes would you expect regarding nonbank competition in the various product lines ?
- A8. I reckon that Citi is well positioned in the retail banking market segment. I cannot see a significant threat of substitution from any nonbank competitor just now.
9. Did your organisation regard the market-entry as significant ? If so, why ?
- A9. Only independent credit card organisations were regarded as strong competitors and we reacted accordingly. They could severely harm our consumer

credit market bearing in mind the attitude of typical US customers to relatively high levels of short-term consumer credit compared to for instance German customers. Thrifts were only very local competitors, retailers lacked the financial credibility, and insurers were more or less out of reach due to our banking legislation.

10. Could you describe the competitive relation between nonbank competitor and your organisation. Is it weak or strong ? Please specify.

A10. Only the competitive relation between our organisation and credit card providers developed into a strong competitive relation. With regard to the other three types of nonbank competitors, the competitive relation is weak.

11. What was your organisation's strategic response ?

A11. Citi decided to substantially increase its market share in the card market by aggressively taking over two independent credit card providers Diners Club and Card Blanche and combining it with the existing card business.

12. When did the strategic response happen ?

A12. The takeovers occurred in 1981 and 1983. The implementation of a centralised card management and processing strategy was done in 1982 and 83 (Sioux Falls, South Dakota).

13. Could you please specify the business activities undertaken ?

A13. The business activities undertaken were mainly of an creative and integrative nature and ranged from system integration in information technology and applications, the transfer of entire processing locations, the design and build up of a new location, to the closure of redundant card centres.

14. What changes, if any, were required within your organisation ?

A14. Apart from the requirements that came with the relocation decision, a major change was the recognition at the beginning of the previous decade that Citi had started to aggressively move into consumer banking.



## **2. IT Strategy, role, development, and cost**

1. How would you regard the role of IT/IS within the banking industry ? Within retail banking ?
  - A1. Citibank regards itself as a 'high-technology' bank (see mission statement). IT is crucial for the provision of services to consumers on a global scale, that is what Citi intends a truly global and service dedicated organisation.
2. IS/IT - importance in your organisation ? Position in the organisation ? Likely development ?
  - A2. IT is placed very high in the organisation (on the Board level) In Qoutron (purchased in 1986) Citi even runs its own IT subsidiary to develop true proprietary software and systems. This company was also targeted at gaining a slice of the growing market of dedicated banking software technology.
3. How has IS/IT changed the relationships with your business partners ?
  - A3. Traditionally, Citi has pursued an proprietary approach regarding major strategic movements, such as the card business or self-service banking. Relations with business partners, for instance Dun & Bradstreet and Reuters, in terms of IT, therefore, remained relatively loose.
4. What are current IT strategies in your organisation ?
  - A4. We are currently discussing a common technology framework. That framework is an agreement on how software, hardware, and communications can be unified under one architecture. This standard is necessary to speed up product introduction, enable the introduction of balkanized back offices, and through the latest in software technology, transform the bank from being a high cost supplier of services to a much more efficient operation.
5. Could you describe the IT strategy of your organisation throughout the 1980s ?
  - A5. The major IT strategy of the 1980s was to build up the general IT coverage within the entire institution

according to Walter Wriston's concept of the fifth power (with which he *inter alia* meant the significance of the information function for a modern commercial bank). According to the rapid development of the retail banking function, decentralised computer power, related application systems, self-service banking stations (ie cash dispensers and ATMs), and the like were installed in each branch in order to enhance customer responsiveness. However, this strategy led to the result, at the end of the 1980s, that a whole array of independent and partially incompatible computer systems existed, that impeded the quick roll-out of new retail banking products.

6. How did your organisation respond in terms of IT to the market-entry of nonbank competitors ?
- A6. Citi decided to centralize its card processing and servicing infrastructure which developed into an amalgamation of a variety of different card products.
7. When, if ever, did the response occur ?
- A7. Citi responded to the market-entry of independent credit card organisations in 1981/82. The bank did not respond substantially to retailers, insurers, and thrifts market-entry activities.
8. Could you please specify as detailed as possible what IT activities were performed directly attributable to the market-entry of a nonbank competitor ?
- A8. With regard to the establishment of our centralised card processing and servicing approach (which was at least partially triggered by a change in state banking legislation regarding the credit card business), this decision meant significant investment in IT (hardware, software, cabling and communication facilities etc) to equip a completely new designed processing location. In addition, large scale program transfer and redesign activities of the existing credit card systems in conjunction with system integration activities had to be done. The individual programming tasks ranged from credit applications, data capture, posting, and statementing functions, to issue and credit collection programs. At the beginning, the majority of these applications were coded as batch processing applications. From the mid-1980s onwards, however, they were incrementally replaced by online solutions.



9. What were the cost of these IT activities ?
- A9. I cannot provide you with cost information concerning this topic.
10. What was the development (size) of the IT budget devoted to retail banking in your organisation ?
- A10. In 1990, Citi spent \$ 1.57 billion on IT, application systems, and related areas such as training. Throughout the 1980s, the IT budget was constantly growing with a large share devoted to consumer banking.
11. Is the aggregated sum of the IT cost directly attributable to the market-entry of a nonbank competitor - in the year of the strategic response - bigger than 20 % of the IT budget devoted to retail banking in that year ?
- A11. With regard to the activities performed in the area of card businesses, the aggregated sum of these activities in 1981/82, was bigger than 20 percent of the IT budget devoted to retail banking in that year. However, the aggregated IT expenses concerning POS, insurance, and thrifts during the previous decade were much less than 20 percent.
12. Would you regard a change in technology as the main driver for a change in the IT strategy ?
- A12. Citi has always been among the leaders with regard to information technology in banking. This naturally meant investment in IT as soon as it became available. However, one cannot believe that any commercial bank would invest significantly in information technology without satisfying an identified business need or because of competitive pressures.

## **Chase Manhattan Bank**

Respondents within Chase Manhattan:

1. Mr.Po, Head of IT, Chase Manhattan Germany, in this position for five years
2. Mr.Ty, IBM Large Account Sales Rep. of Chase Manhattan, in this position since 1989
3. Mr.Wa, IBM Account Manager Chase Manhattan, in this position since 1989
4. Mr.Gre, Industry consultant and project manager with McKinsey, 5 years banking and IT experience with McKinsey

These respondents were confronted with the following list of questions. Each respondent generally answered only a subset of the questions depending on his experience and nature of the job. The aggregated insights gained are presented in the attached tableau.

### **1. Strategy and Marketing - Retail banking**

1. What is the general corporate/marketing strategy towards nonbank competitors ? Towards insurers, thrifts, retailers, and credit card organisations ?
- A1. Retailers, insurers, and thrifts were not regarded as strong competitors to the retail banking business in the interval 1980-90. This was due to Chase' selective approach to retail banking. The bank focused only on upper- and middle-income segments of the retail market - professionals, executives, and individuals of high net worth. With regard to independent credit card

organisations, such as American Express, Chase decided to create a central subsidiary, the Chase Bank (USA) and to purchase a substantial cheque business of First National Bank of Chicago to push its card and traveller cheque business.

2. When did the market-entry occur ?
  - A2. American Express significantly entered the retail banking market in 1980/81, and thrifts followed a year later (triggered by deregulation). Insurers attempted to enter the market in 1985/86, and retailers did the same thing in 1986, if one looks at Sears' in-store financial centres and Discover card activities.
3. Could you please comment on the event (and date shown)?
  - A3. The services and entry dates identified seem to be correct.
4. What effect did the market-entry have on the organisation and the product line affected ?
  - A4. Chase' card business, the Case Visa, ran into troubles in 1980/81. Profitability fell strongly in these years.
5. Why did the market-entry occur ?
  - A5. Nonbank competitors were attracted by commercial banks' traditional growth and high profitability. They wanted to participate in this growth potential. They also identified similarities in the provision of typical retail banking services and for instance the retailing of merchandise or insurance services. American Express wanted to benefit from the strong growth potential of credit cards as the main noncash payment vehicle and the tendency of typical US customers towards short-term consumer credit.
6. What are the characteristics of the nonbank competitor; advantages/weaknesses ? In relation to your own organisation ?
  - A6. American Express had a long experience in the T & E business including extensive customer databases. This competitor also tackled the same target group, the high net worth individuals. Chase, in turn, particularly with wealthy individuals, has

traditionally close relations with its customer base, and a good reputation as banking service providers. Like other nonbanks, American Express had the advantage of establishing a nationwide network of locations whereas the interstate banking legislation prohibited commercial banks from doing the same.

7. What was the market penetration strategy applied by the nonbank competitor ?
- A7. American Express tried to mass-market the credit card, by diversifying from their traditional T & E and cheque business firstly into the upmarket target group of wealthy individuals by providing corporate and golden cards. They then also attacked the middle market segment through the provision of personal cards. Overall, the number of features on each card was also gradually increased.
8. What, if any, changes would you expect regarding nonbank competition in the various product lines ?
- A8. Chase, by now, has defined its retail banking market segment very clearly. I think that interbank competition, in our markets, will be a stronger competitive force in the near future than the threat of substitution by nonbank competitors.
9. Did your organisation regard the market-entry as significant ? If so, why ?
- A9. Only independent credit card organisations were regarded as strong competitors and we reacted accordingly. They could severely harm our retail banking efforts, which were to a large extent card and cheque based at the beginning of the previous decade because of their target group definition. Thrifts and retailers are not really competitors in our retail banking markets segments. Insurers were more or less out of reach due to our banking legislation.
10. Could you describe the competitive relation between nonbank competitor and your organisation. Is it weak or strong ? Please specify.
- A10. Only the competitive relation between our organisation and credit card providers developed into a strong competitive relation. With regard to the other three types of nonbank competitors, the competitive relation is weak.

11. What was your organisation's strategic response ?

A11. Chase founded a new national bank, the Chase Bank, which was the focal point for Chase' entire card business and the Chase Visa Cheque business. Additionally, Chase decided to substantially increase its market share by purchasing traveller cheque business from First National Bank of Chicago.

12. When did the strategic response happen ?

A12. The establishment of the subsidiary, the purchase, and the centralisation approach, all three occurred in 1982.

13. Could you please specify the business activities undertaken ?

A13. The business activities undertaken were mainly IT related. The computer systems of the acquired business and the incumbent had to be integrated. Furthermore, the existing Chase Visa processing location was transferred to the newly designed banking location.

14. What changes, if any, were required within your organisation ?

A14. Apart from the restructuring activities, the whole company had to become much more focused and customer responsive.

## **2. IT Strategy, role, development, and cost**

1. How would you regard the role of IT/IS within the banking industry ? Within retail banking ?

A1. IT is not only an important means of cost reduction, it is nowadays a critical success factor for a bank operating in a highly competitive marketplace.

2. IS/IT - importance in your organisation ? Position in the organisation ? Likely development ?

A2. IT is placed very high in the organisation and many products incorporate an IT element or are solely IT-based (ie InfoCash, Same-Day-Reporter). However, it does not have the same significance as it has to for instance Citibank, which tackles the entire retail



banking market.

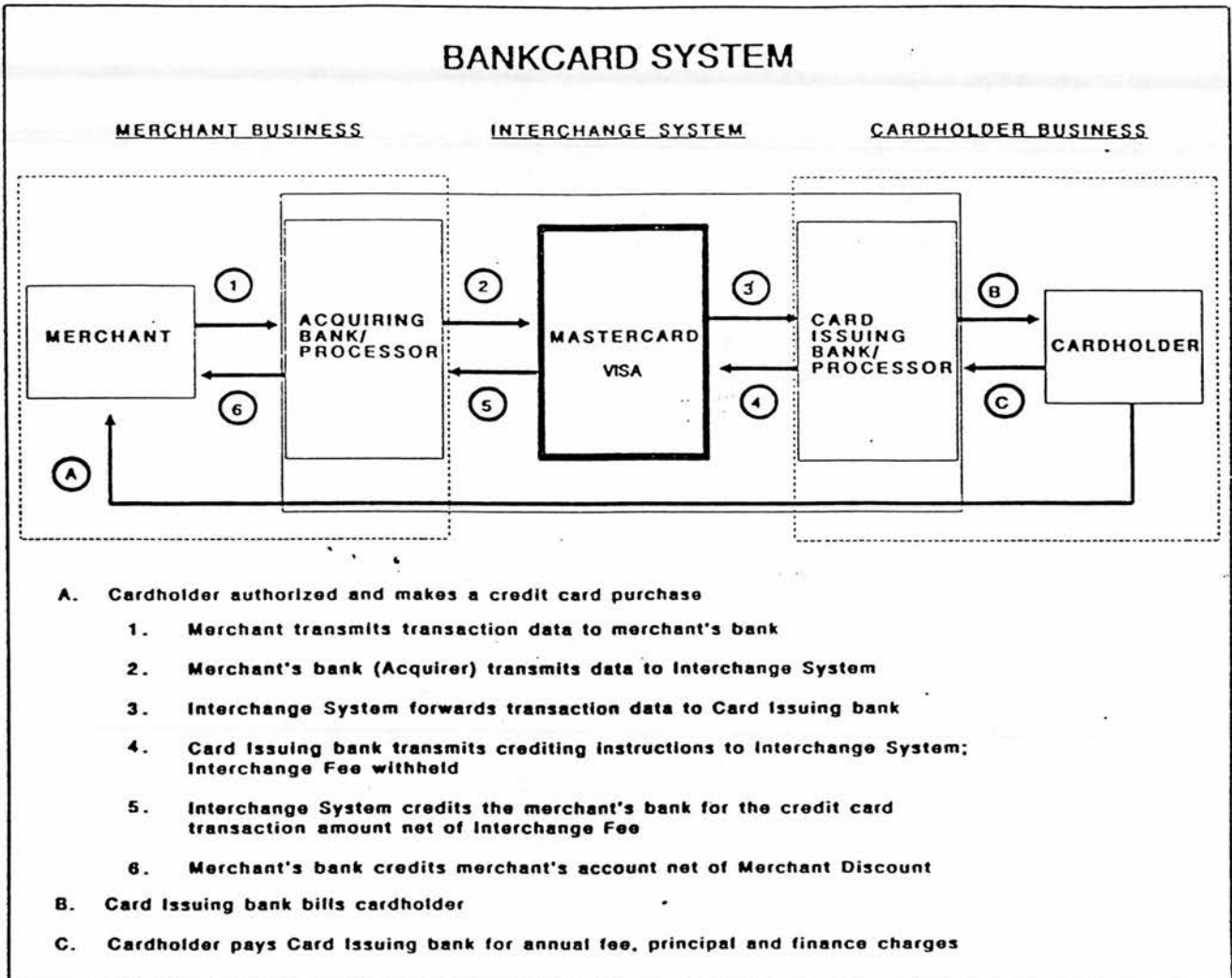
3. How has IS/IT changed the relationships with your business partners ?
- A3. Through investments in telecommunication technology and networking throughout the 1980s (ie Chase International Data Network), Chase could improve and speed up relations to business partners, internally and externally.
4. What are current IT strategies in your organisation ?
- A4. We are currently increasing the market penetration of self-service components and providing widely enhanced decentralised computer power on the branch level via PCs and intelligent workstations.
5. Could you describe the IT strategy of your organisation throughout the 1980s ?
- A5. The major IT strategy of the 1980s was to quickly build up a high degree of terminalisation in the bank on a world-wide basis paired with the implementation of highly proficient internal data communication networks. In addition, the level of automation of routine backoffice processes should be enhanced.
6. How did your organisation respond in terms of IT to the market-entry of nonbank competitors ?
- A6. Chase decided to centralize its card and traveller cheque marketing, servicing, and processing and infrastructure through the foundation of a new subsidiary.
7. When, if ever, did the response occur ?
- A7. Chase responded to the market-entry of independent credit card organisations in 1982. The bank did not respond to retailers, insurers, and thrifts market-entry activities.
8. Could you please specify as detailed as possible what IT activities were performed directly attributable to the market-entry of a nonbank competitor ?
- A8. With regard to the establishment of the Chase Bank, this decision meant significant investment in IT ranging from hardware capable of handling strongly increased volumes of data, optical character readers, software, cabling and communication facilities etc) to

equip a completely new bank. In addition, large scale program transfer and redesign activities of the existing card and cheque systems in conjunction with system integration activities of the purchased cheque application system had to be done.

9. What were the cost of these IT activities ?
- A9. I cannot provide you with cost information concerning this topic.
10. What was the development (size) of the IT budget devoted to retail banking in your organisation ?
- A10. Over the interval 1980-90, the IT budget devoted to retail banking was gradually growing in line with our involvement.
11. Is the aggregated sum of the IT cost directly attributable to the market-entry of a nonbank competitor - in the year of the strategic response - bigger than 20 % of the IT budget devoted to retail banking in that year ?
- A11. With regard to the activities performed in the area of credit cards and traveller cheques, the aggregated sum of these activities in 1982, was bigger than 20 percent of the IT budget devoted to retail banking in that year. However, the aggregated IT expenses concerning POS, insurance, and thrifts during the previous decade were almost negligible.
12. Would you regard a change in technology as the main driver for a change in the IT strategy ?
- A12. I think that both technological innovations and business needs together drive the IT strategy of a bank. It is difficult to tell which factor is dominant.



## Appendix 2



**Source:** Journal of Retail Banking, vol.12, no.2,  
Summer 1990, p.37

### Appendix 3

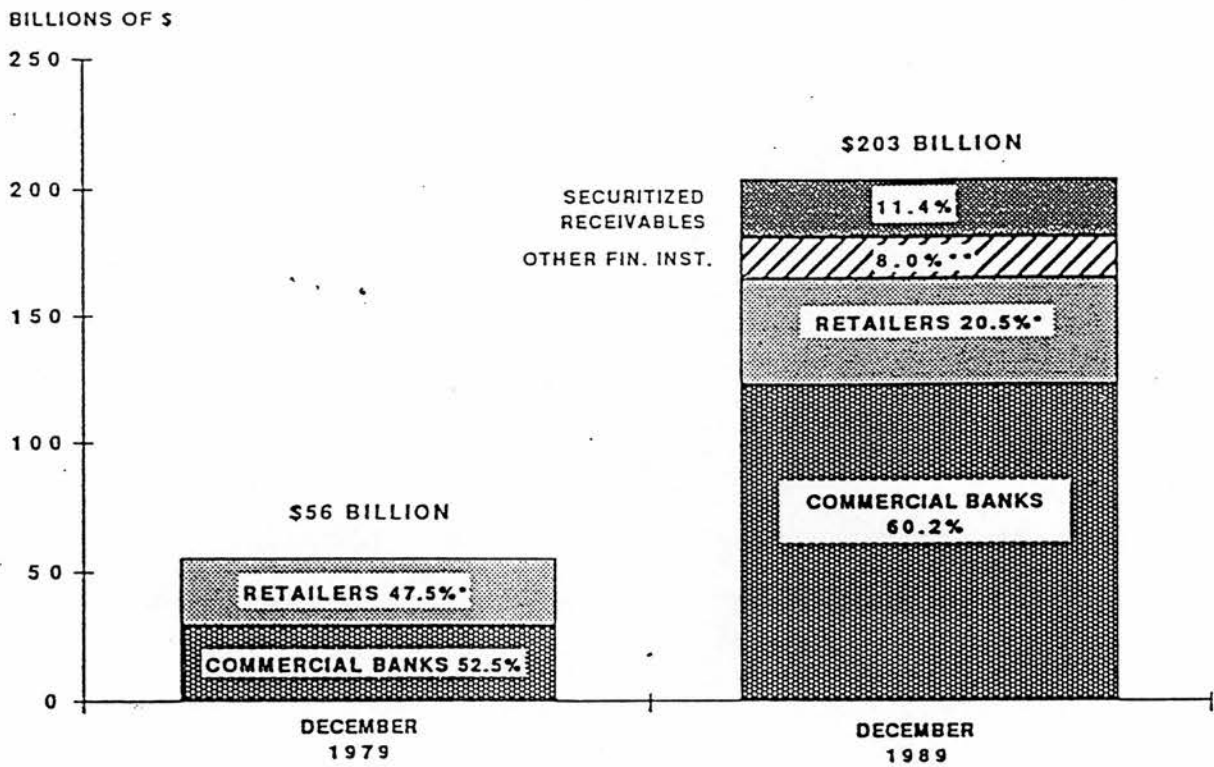
#### Market Share of Leading German Bausparkassen

Institutions	1988 in %	1989 in %
Bausparkasse Schwäbisch Hall	32.12	32.39
BHW-Bausparkasse	26.81	25.96
Bausparkasse Wüstenrot	19.15	18.63
Leonberger Bausparkasse	5.49	5.43
Badenia Bausparkasse AG	3.36	3.59
Deutsche Bank Bauspar AG	0.59	0.94
Dresdner Bauspar AG	-	0.06

**Source:** Bank und Markt, iss.4, April 1991, p.15.

## Appendix 4

### Growth and Distribution of Revolving Credit in the US 1979 - 1989



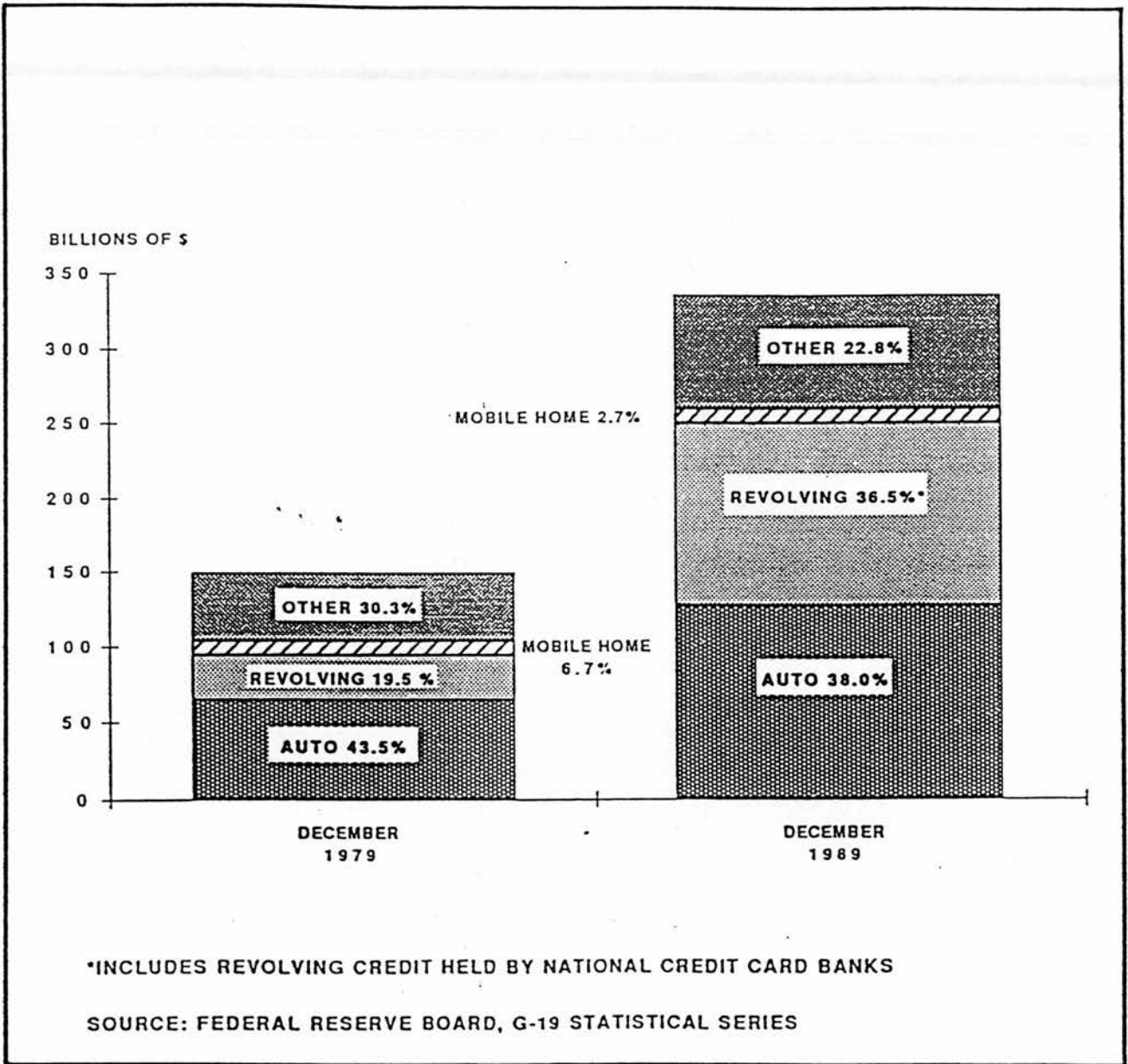
\*RETAILERS INCLUDES GASOLINE COMPANIES

\*\*OTHER FINANCIAL INSTITUTIONS INCLUDES SAVINGS INSTITUTIONS AND CREDIT UNIONS

**Source:** Journal of Retail Banking, vol.12, no.1,  
Spring 1990, p.68.

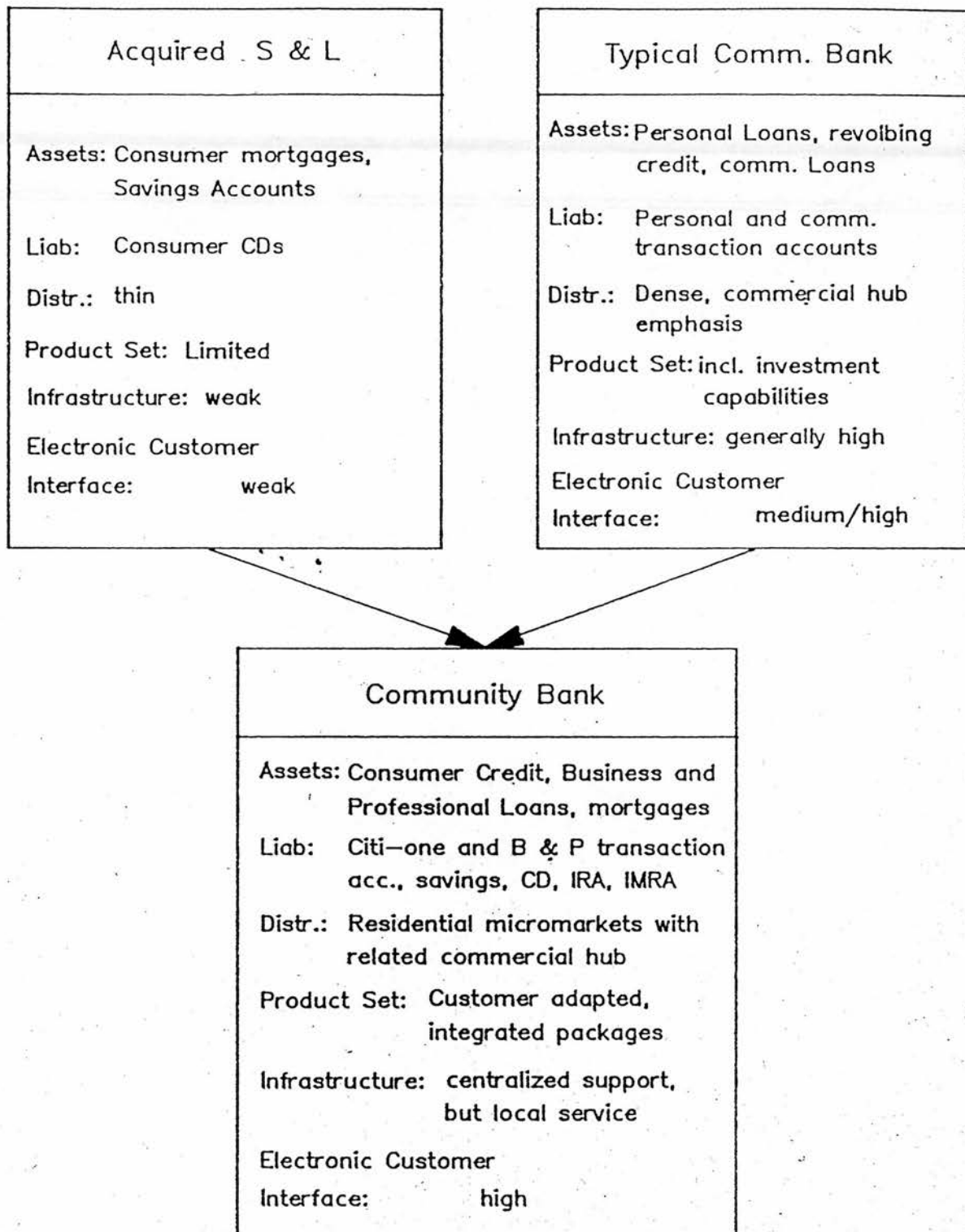
## Appendix 5

### Bank Consumer Credit Portfolios in the US 1979 to 1989



Source: Journal of Retail Banking, vol.12, no.1,  
Spring 1990, p.69.

## Appendix 6



## Appendix 7

### Distribution of Credit Cards in the US and Germany

#### 1) Total Distribution Figures in Germany (in 1000):

1987	1988	1989	1990	1991
1,650	2,150	3,430	4,450	5,560

#### 2) Distribution by Card Issuer in Germany (in 1000):

	1985	1992
Eurocard	350	4,000
VISA	130	1,650
Diners	280	360
AmEx	430	1,000

**Source:** Handelsblatt, Nov. 10th, 1992, p.13

#### 3) Distribution of AmEx Card Service in the US (in Mio):

1985	1986	1987	1988	1989	1990	1991
16.3	17.2	19.7	22.3	24.3	25.9	25.8

**Source:** Company Records, 1992

## Appendix 8

### Deposits made by Nonbanks in Germany in 1981-89

<u>Years</u>	<u>DM Bln.</u>	<u>Growth in %</u>
1981	1,254	
1982	1,329	6.0
1983	1,408	6.0
1984	1,506	7.0
1985	1,638	8.8
1986	1,762	7.6
1987	1,884	6.9
1988	1,982	5.2
1989	2,078	4.8

**Source:** German Bundesbank, Monthly Report, Statistical Supplement, vol.42, iss.8, August 1990, pp.14-15



## Appendix 9

### Credit taken by Nonbanks in Germany in 1981-89

<u>Years</u>	<u>DM Bln.</u>	<u>Growth in %</u>
1981	1,616	
1982	1,709	5.8
1983	1,816	6.3
1984	1,918	5.6
1985	2,035	6.1
1986	2,105	3.4
1987	2,180	3.6
1988	2,299	5.4
1989	2,438	6.0

**Source:** German Bundesbank, Monthly Report, Statistical Supplement, vol.42, iss.8, August 1990, pp.16-17

## Appendix 10

### Total Debt owed by US Private Domestic Nonfinancial Sector

<u>Years</u>	<u>\$ Bln.</u>	<u>Growth in %</u>
1984	4575.1	
1985	5204.1	17.7
1986	5831.0	12.0
1987	6383.6	9.5
1988	6978.2	9.3
1989	7535.8	8.0

**Source:** Federal Reserve, Domestic Financial Statistics,  
Table A44, various issues

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### Total Credit Market Claims by US Private Domestic Nonfinancial Investors

<u>Years</u>	<u>\$ Bln.</u>	<u>Growth in %</u>
1985	4607.8	
1986	5027.2	9.1
1987	5438.0	8.2
1988	5938.0	9.2
1989	6420.7	8.1

**Source:** Federal Reserve, Domestic Financial Statistics,  
Table A45, various issues

## Appendix 11

### US Consumer Instalment Credit Outstanding held by Commercial Banks

<u>Years</u>	<u>\$ Mio</u>	<u>Growth in %</u>
1981	147,622	
1982	152,490	3.3
1983	171,978	12.8
1984	212,391	23.5
1985	242,084	14.0
1986	261,604	8.1
1987	278,537	6.5
1988	324,792	16.6
1989	343,865	5.9
1990	345,132	0.4

**Source:** Federal Reserve, Domestic Financial Statistics,  
Table A39, various issues

## Appendix 12

GROWTH OF HOUSEHOLDS' FINANCIAL ASSETS AND LIABILITIES 1960-1984

	Compound Annual Growth Rates			Growth Rate Differential vis-à-vis All Domestic Non-financial Sectors' Financial Assets/Liabilities (1)			Ratio to All Domestic Non-financial Sectors' Financial Assets/Liabilities			
	1960/1970	1970/1980	1980/1984	1960/1970	1970/1980	1980/1984	1960	1970	1980	1984
<u>Financial Assets</u>										
Australia	9.8	14.5	12.0	1.1	1.1	0.5	66.9	67.8	74.8	76.1
Canada	8.6 (2)	13.8	9.9	-0.4 (2)	0.6	0.4	60.8 (2)	58.9	61.7	62.6
Germany	13.5	11.5	7.5	2.4	1.3	-	44.8	55.6	62.8	62.9
Italy	11.5 (3)	19.2	19.1	1.3 (3)	-0.8	1.4	57.3 (3)	62.3	58.3	61.1
Japan	18.4	17.0	10.6	-0.6	1.9	1.5	45.8	43.6	51.1	54.0
Sweden	..	9.6	13.7	..	-2.3	-0.7	..	52.3	42.5	41.5
United States	7.1	8.9	10.0	0.2	-0.2	0.7	78.6	79.4	77.6	79.6
<u>Liabilities</u>										
Australia	9.1	14.5	13.5	2.0	2.5	-1.2	22.3	26.8	33.4	32.1
Canada	11.7 (2)	14.5	5.4	2.8 (2)	1.1	-4.2	14.3 (2)	17.9	19.6	16.8
Germany	13.6	15.9	5.9	2.7	5.3	-1.8	3.0	3.8	6.1	5.7
Italy	13.7 (3)	16.9	15.9	4.2 (3)	-4.1	-4.6	4.2 (3)	5.5	3.9	3.3
Japan	21.3	16.5	8.8	2.1	1.8	0.3	15.9	19.0	22.3	22.5
Sweden	..	13.6	11.0	..	-0.3	-3.8	..	26.3	25.7	22.5
United States	8.2	11.6	9.6	1.2	0.9	-1.3	29.1	32.6	35.2	33.7

1. Annual rate of growth of households' financial assets/liabilities minus annual rate of growth of all domestic non-financial sectors' financial assets/liabilities.
2. 1961-70 and 1961, respectively.
3. 1963-70 and 1963, respectively.

**Source:** OECD, Competition in Banking, Annex 2, Table 5.1,  
Paris, 1989

# Appendix 13

## Compound Annual Rates of Growth of Total Assets of Deposit Money Banks (in current US \$)

	<u>1960/1970</u>	<u>1970/1980</u>	<u>1980/1985</u>
United States	8.3	11.2	9.8
Germany	15.2	18.2	2.3

Source: OECD, Competition in Banking, Annex 2, Table 3.3, Paris, 1989

CHANGE IN RELATIVE IMPORTANCE OF FINANCIAL INSTITUTIONS 1960-1984  
(Per cent of assets of all financial institutions; end-year)

		Commercial Banks	Other Deposit Institutions	Special Credit Institutions	Finance Companies	Insurance Companies	Pension Funds	Investment Funds	Financial Institutions Total
Australia	1960	37	27	1	..	23	10	2	100
	1970	29	29	2	..	27	12	1	100
	1980	25	30	1	16	18	10	0	100
	1984	31	28	1	11	17	11	1	100
Austria	1966	78	22	..	..	..	..	0	100
	1970	75	20	..	..	5	..	0	100
	1980	77	19	..	..	4	..	0	100
	1984	74	21	..	..	4	..	1	100
Belgium	1980	58	9	27	..	6	..	0	100
	1984	64	7	21	..	7	..	1	100
Canada	1960	39	12	6	6	24	11	2	100
	1970	40	16	9	5	16	11	3	100
	1980	47	20	9	3	9	11	1	100
	1984	44	19	9	2	10	13	1	100
Denmark	1961	71	..	..	..	24	5	0	100
	1970	74	..	..	..	20	6	0	100
	1980	71	..	..	..	21	7	1	100
Finland	1960	35	42	5	..	12	6	-	100
	1970	38	32	..	..	13	8	-	100
	1980	34	32	8	..	18	6	-	100
	1984	37	30	7	4	16	6	-	100
Germany	1960	31	40	13	..	12	2	2	100
	1970	30	42	10	..	14	2	2	100
	1980	26	48	7	..	14	2	3	100
	1984	25	47	7	..	16	2	3	100
Italy	1960	64	18	18	..	..	..	..	100
	1970	62	18	20	..	..	..	..	100
	1980	65	19	16	..	..	..	..	100
	1984	64	20	16	..	..	..	..	100
Japan	1960	52	19	17	..	5	..	7	100
	1970	45	25	17	..	7	..	6	100
	1980	38	24	24	..	7	..	7	100
	1984	37	22	25	..	7	..	9	100
Netherlands	1960	23	26	14	..	16	17	4	100
	1970	27	26	12	..	11	20	4	100
	1980	38	22	8	..	8	22	2	100
	1984	38	20	8	..	8	24	2	100
Spain	1980	63	26	8	..	2	..	1	100
	1984	61	28	9	..	2	..	0	100
Sweden	1960	39	22	13	..	23	1	2	100
	1970	32	16	22	1	13	15	1	100
	1980	34	13	22	3	11	16	1	100
	1984	34	11	23	4	12	14	2	100
United States	1960	38	19	2	5	23	10	3	100
	1970	37	20	3	5	19	13	3	100
	1980	35	21	5	5	16	15	3	100
	1984	33	21	5	4	15	16	6	100

Source: OECD, Competition in Banking, Paris, 1989, p.125

## Appendix 14

Methods of payment  
as a percentage of total volumes of transactions in 1988

Countries	Cheques	Payments by credit card	Payments by debit card at POS	Paper- based credit transfers	Paperless credit transfers	Direct debits
Belgium.....	31.0	1.2	6.7	41.8	12.3	7.0
France.....	62.6	..	11.4	1.5	15.0	9.5
Germany.....	9.9	0.7	0.0	27.4	25.3	36.7
Italy.....	49.2	1.2	0.1	43.8	3.7	2.0
Japan.....	5.8	11.6	.	12.4	27.8	42.4
Netherlands.....	17.7	0.3	0.2	38.1	27.0	16.7
Sweden.....	20.9	2.1	.	30.9	46.1	.
Switzerland.....	13.0	4.0	0.8	29.2	49.6	3.4
U.K.....	54.7	12.4	0.2	8.7	13.4	10.6
U.S.A.....	84.2	14.0	0.1	.	1.2	0.5

Source: Frost & Sullivan Inc, The European Market For Remote Banking Network Products, Summer 1990, Table 9.10

### Appendix 15

Comparison of the number of Cash Dispensers, ATM and EFTPOS terminals in Europe, United States and Japan - 1st January 1989

Countries	Cash Dispensers and ATMs		EFTPOS terminals	
	Number of machines installed	Number of inhabitants per machine	Number of machines installed	Number of inhabitants per machine
Belgium.....	844	11,763	19,118	519
France.....	11,457	4,862	120,000	464
Germany.....	7,500	8,213	8,669	7,106
Italy.....	5,700	9,958	4,360	13,019
Netherlands.....	1,017	14,454	1,495	9,833
Sweden.....	1,741	4,859	1,202	7,037
Switzerland.....	1,736	3,813	1,398	4,735
United Kingdom....	13,870	4,108	24,300	2,346
Japan.....	73,357	1,674	642	191,299
United States.....	81,161	3,024	44,000	5,614

**Source:** Frost & Sullivan Inc, The European Market For Remote Banking Network Products, Summer 1990, Table ES 2



## Appendix 16

### Large German Commercial Banks' Operating Expenses of the Banking Business<sup>1</sup>

1982	DM Mio 2,604
1983	DM Mio 2,349
1984	DM Mio 2,588
1985	DM Mio 2,959
1986	DM Mio 3,286
1987	DM Mio 3,430
1988	DM Mio 3,648
1989	DM Mio 3,869
1990	DM Mio 4,309

**Source:** German Bundesbank, Monthly Report, P & L - Statements, vol.42, iss.8, 1990, p.28; also vol.44, iss.8, 1992, p.42

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<sup>1</sup> This includes depreciation on IT equipment, property, and general equipment. Personnel and other administrative expenses are excluded.

## Appendix 17

### Equipment Depreciation of US FED Banks' - District New York (in US \$ 1000)

1981	\$ 4,995,667
1982	\$ 6,627,483
1983	\$ 7,331,591
1984	\$ 8,795,575
1985	\$ 10,598,470
1986	\$ 11,178,992
1987	\$ 13,306,148
1988	\$ 15,107,959
1989	\$ 16,404,776
1990	\$ 16,868,964
1991	\$ 16,880,471

**Source:** Board of Governors of the Federal Reserve System,  
Annual Report, var. iss., Stat. Annex, Table 6

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